C-141 CLASS A MISHAPS
SORTED BY EVENT-NR
1975 TO DATE (11099)
MSGT KASSABIAN, 429MAW/SE, MCGUIRE AFB NJ 08641-5000

atuff/

5 100001

CLASS A DEST MAC C141A 64000641 ACFT DAMAGE - CLS A DST INJURY CLASS - FATAL PHASE OF OPR - CRUISE-DESCENT DESCRIPTION -SYSTEM NEC (MISC) UNSAFE ACT - ATTEMPTED FLT POOR PHYS COND BASIC CAUSE - NODEFECT TOTO DECM/W BASE OF ASSON - MCCHORD AFB WASH NEAR BASE - MCCHORD AFB WASH SET CODE 1 - C18 SEY-CODE 2 - S122A W NET CODE -

C. F L LINER CLEARED BELOW MSA, HIT MTS

# DESCRIPTION

C-141A. THE AIRCRAFT WAS RETURNING FROM A ROUTINE CHANNEL THE IFT MISSION AND WAS ON A RADAR VECTOR TO DESTINATION HASE. THE AIRCRAFT WAS ISSUED A DESCENT CLEARANCE FROM 10,000 TO 5,000 FEET. RADAR CONTACT WAS LOST 3 MINUTES AFTER THE DESCENT CLEARANCE WAS ACKNOWLEDGED. THE AIRCRAFT IMPACTED THE 7,150-FOOT LEVEL OF A 7,300-FOOT MOUNTAIN RIDGE AND WAS DESTROYED. ALL ABOARD, 10 CREW MEMBERS AND SIX PASSENGERS, WERE KILLED ON IMPACT.

# FINDINGS

C-141A. FINDING 1. CAUSE. OPERATIONS FACTOR, SUPERVISION (INDIRECT). MAC FAILED TO ENSURE THAT CREW REST REGULATIONS AND SCHEDULING PROCEDURES REFLECTED HUMAN LIMITATIONS AND HUMAN REQUIREMENTS IN DETERMINING APPROPRIATE REST PERIODS. FINDING 2. CAUSE. OPERATIONS FACTOR, OPERATOR. THE AIRCRAFT COMMANDER DID NOT PLACE HIS CREW INTO CREW REST AT THE ENROUTE BASE EVEN THOUGH THEY HAD NOT HAD SIGNIFICANT REST IN THE PRECEDING 18 HOURS, AND THE FLIGHT WAS SCHEDULED FOR 9 ADDITIONAL HOURS. FINDING 3. CAUSE. OTHER FACTOR, OTHER PERSONNEL. AIR ROUTE TRAFFIC CONTROL CENTER (ARTCC) PERSONNEL DID NOT COMPLY WITH PUBLISHED FAA DIRECTIVES, I.E., IMPROPER STRIP MARKING, INADEQUATE TRAINING RECORDS, IMPROPER USE OF SHRIMP BOATS (TARGET MARKERS), USE OF IMPROPER RADIO PHRASEOLOGY, THE IMPROPER USE OF RADAR SCOPE EQUIPMENT IN THE VERTICAL VERSUS HORIZONTAL POSITION DURING BROADBAND OPERATION, AND THE USE OF MEDICATION. FINDING 4. CAUSE. OTHER FACTOR, OTHER PERSONNEL. THE ARTCC CONTROLLER ISSUED AN IMPROPER AND ERRONEOUS CLEARANCE TO THE AIRCRAFT TO DESCEND TO 5,000 FEET IN AN AREA WHERE THE MINIMUM SAFE ALTITUDE IS 10,000 FEET. FINDING 5. THE FLIGHT CREW WAS FATIGUED AS A RESULT OF THE 28 HOURS WHICH HAD PASSED SINCE THEIR LAST SIGNIFICANT REST. FINDING 6. CAUSE. OPERATIONS FACTOR, OPERATOR. THE AIRCRAFT COMMANDER ACCEPTED AND FLEW A DESCENT CLEARANCE THAT DID NOT ENSURE ADEQUATE TERRAIN CLEARANCE. FINDING 7. CAUSE. OPERATIONS FACTOR, OTHER CREW MEMBER. THE CREW FAILED TO UTILIZE ALL AVAILABLE MAVIGATION EQUIPMENT TO DETERMINE THE EXACT LOCATION OF THE ATRORAFT AND ENSURE TERRAIN AVOIDANCE. FINDING 8. CAUSE. THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)

FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

OPERATIONS FACTOR, SUPERVISION (INDIRECT). AFM 51-40 AND AFM 51-37 DO NOT CONTAIN ADEQUATE GUIDANCE FOR AN ENROUTE DESCENT FROM THE HIGH ALTITUDE ENROUTE STRUCTURE TO THE LOW ALTITUDE APPROACH PHASE OF A FLIGHT WHILE FLYING OFF AIRWAYS OR ON RADAR VECTORS. FINDING 9. THE AIRCRAFT IMPACTED MOUNTAINOUS TERRAIN RESULTING IN DESTRUCTION OF THE AIRCRAFT AND FATAL INJURIES TO THE CREW AND PASSENGERS.

# 750524002

CLASS A DEST MAC C141A 65000269 ACFT DAMAGE - CLASS A
INJURY CLASS - NONE PHASE OF OPR - TAXIING-TAKEOFF

DESCRIPTION SYSTEM STRUT LEFT MAIN

UNSAFE ACT - LANDED GEAR UP OR RAISED GEAR

BASIC CAUSE - STRESS CORROSION

BASE OF ASSGN - CHARLESTON AFB S C NEAR BASE - DOVER AFB DEL

SEY-CODE 1 - G49 SEY-CODE 2 WORK UNIT CODE -13AAA

ACFT 1 LINER LT M/L/G STRUT FAILED

# DESCRIPTION

C-141A. THE MISSION WAS SCHEDULED TO BE AN AIRLIFT MISSION ORIGINATING AT DOVER AFB, DELAWARE AND TERMINATING AT RHEIN MAIN AB, GERMANY. POWER WAS APPLIED TO START TAXIING TO THE ACTIVE RUNWAY WHEN, AFTER ROLLING APPROXIMATELY 100 FEET, AN EXPLOSION WAS HEARD BY THE AIRCREW. THE LEFT MAIN GEAR COLLAPSED AND THE AIRCRAFT SETTLED TO THE TAXIWAY AND FORWARD MOTION STOPPED. THE AIRCRAFT COMMANDER, OBSERVING THE LEFT WING AND NUMBER 1 ENGINE IN CONTACT WITH THE GROUND ORDERED EVACUATION OF THE AIRCRAFT. ALL PASSENGERS AND CREW MEMBERS EVACUATED THE AIRCRAFT, UTILIZING THE RIGHT TROOP DOOR AND THE CREW ENTRANCE DOOR. NO INJURIES WERE SUSTAINED BY ANY PERSONNEL INVOLVED.

#### FINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, EQUIPMENT MAINTENANCE. OVERHAUL REWORK PROCEDURES INTRODUCED A GRINDING BURN ON THE INSIDE SURFACE OF THE OUTER CYLINDER. THIS GRINDING BURN PROVIDED AN ORIGIN FOR THE STRESS CORROSION WHICH LED TO CATASTROPHIC FAILURE. FINDING 2. CAUSE. LOGISTICS FACTOR, SUPERVISION (DIRECT). OVERHAUL INSPECTION PROCESS FAILED TO DETECT THE FLAW INTRODUCED BY THE GRINDING BURN. FINDING 3. THE LEFT MAIN LANDING GEAR SHOCK STRUT ASSEMBLY DEVELOPED A CRACK DUE TO STRESS CORROSION. FINDING 4. THE CRACK CAUSED CATASTROPHIC FAILURE OF THE OUTER CYLINDER ASSEMBLY ALLOWING THE LEFT WING TIP AND NUMBER 1 ENGINE NACELLE TO SETTLE TO THE GROUND, CAUSING MAJOR AIRCRAFT DAMAGE.

750513001

CLASS A DEST MAC C141A 65000265 ACFT DAMAGE - CLASS A 0000011200
INJURY CLASS - NONE PHASE OF OPR - CRUISE-CLIMB
DESCRIPTION - IGN SOURCES-ENGINES
SYSTEM TURBINE WHEEL
UNSAFE ACT - GAVE INADEQ OR INCORRECT INFO
BASIC CAUSE - MTL FATIGUE-LO CYCLE
BASE OF ASSGN - MCGUIRE AFB N J NEAR BASE - TORREJON DE ARDOZ
SEY-CODE 1 - 160 SEY-CODE 2 WORK UNIT CODE -23EBP

ACFT 1 LINER

3 TURBINE WHEEL FAILED, FUEL FIRE

#### FESCRIPTION

C-141A. THE AIRCRAFT WAS DEPARTING FROM AN INTERMEDIATE BASE, ENROUTE HOME FROM A STRATEGIC AIRLIFT MISSION. APPROXIMATELY 3 MINUTES AFTER BRAKE RELEASE, AT 1500 FEET AGL, A LOUD EXPLOSION WAS HEARD AND THE AIRCRAFT YAWED TO THE RIGHT. THE NUMBER 3 ENGINE THRUST REVERSE NOT LOCKED LIGHT, LOW OIL QUANTITY LIGHT, AND LOW OIL PRESSURE LIGHT ILLUMINATED. ALL NUMBER 3 ENGINE INSTRUMENTS FELL TOWARD MERO. THE THROTTLE WAS RETARDED. THE NUMBER 3 ENGINE OVERGEAT WARNING ILLUMINATED. THE FIRE HANDLE WAS PULLED AMD THE ENGINE FAILURE CHECKLIST ACCOMPLISHED. AN THILIGENCY WAS DECLARED, AND CLEARANCE WAS RECEIVED TO DETERMINENT SON FUEL. AIRCRAFT BUFFET WAS NOTED AT SPEEDS APPROACHING 180 KNOTS AND AT BANK ANGLES APPROACHING 15 DEGREES. VISUAL SCAN FROM THE AIRCRAFT REVEALED THE FOLIOWING: BLACK SMOKE AND MIST COMING FROM THE NUMBER 3 ENGINE; THE ENGINE COWLING WAS MISSING; DAMAGE TO THE THOGARD WING FLAP; DAMAGE TO NUMBER 4 ENGINE; A LARGE FUEL LEAK COMING FROM THE NUMBER 3 MAIN FUEL TANK AREA; AND THAT THE RIGHT SIDE OF THE MISSING COWLING HAD LODGED IN THE LEADING EDGE OF THE RIGHT WING. FUEL JETTISON WAS ACCOMPLISHED UNDER RADAR VECTORS. BOTH AIR CONDITIONING PACKS HAD OVERHEATED AND AUTOMATICALLY SHUT DOWN. THE LEFT PACK WAS RETURNED TO OPERATION TO DISSIPATE FUEL FUMES. CONTROLLABILITY CHECKS WERE ACCOMPLISHED; AN APPROACH-FLAP PRECISION APPROACH AND LANDING WERE COMPLETED. THE AIRCRAFT WAS TAXIED CLEAR OF THE RUNWAY AND ENGINES WERE SHUT DOWN. ALL CREW AND PASSENGERS EVACUATED WITHOUT INJURY. DAMAGE TO THE AIRCRAFT WAS DETERMINED TO BE SUBSTANTIAL.

THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)
FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

THE RESIDENCE OF STREET

#### FINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, SUPERVISION
(INDIRECT). NONDESTRUCTIVE TESTING TECHNIQUES WERE NOT
ESTABLISHED TO IDENTIFY INCIPIENT CRACKING IN TF33 P7/7A
ENGINE TURBINE DISC TIE-ROD BOLT HOLES. FINDING 2. CAUSE.
LOGISTICS FACTOR, EQUIPMENT FAILURE. THE THIRD STAGE
TURBINE WHEEL FAILED WHEN OLD CRACKS, WHICH HAD ORIGINATED
AT OPPOSITE TIE-ROD HOLES FROM LOW-CYCLE FATIGUE,
PROGRESSED BOTH INWARD AND OUTWARD RADIALLY UNTIL
INSTANTANEOUS FAILURE RESULTED. FINDING 3. SHRAPNEL
FRAGMENTS FROM THE ENGINE DISINTEGRATION CAUSED SUBSTANTIAL
DAMAGE TO THE FUSELAGE AND RIGHT UNDERWING SURFACE.
FINDING 4. AN EMERGENCY LANDING WAS MADE WITHOUT FURTHER
INCIDENT; THERE WERE NO PERSONNEL INJURIES.

#### 750815001

CLASS A DEST MAC C141A 65009401 ACFT DAMAGE - CLASS A 0000064000
INJURY CLASS - NONE PHASE OF OPR - LANDING-ROLL
DESCRIPTION - COMBUST/FIRE-HYDRL
SYSTEM STRUT NOSE GEAR
UNSAFE ACT - LANDED GEAR UP OR RAISED GEAR
BASIC CAUSE - STRESS CORROSION
BASE OF ASSGN - CHARLESTON AFB S C NEAR BASE - ROTA WAS SPAIN
SEY-CODE 1 - G50 SEY-CODE 2 WORK UNIT CODE -13BAA

ACFT 1. LINER
N/L/G STRUT FAILED, HYD FIRE

# DESCRIPTION

C-141A. THE FINAL PORTION OF A ROUTINE AIRLIFT/TRAINING MISSION TO AN OVERSEAS DESTINATION WAS TERMINATED WITH PRECISION RADAR APPROACH TO MINIMUMS WITH A VISUAL LANDING. A NORMAL, BUT FIRM, TOUCHDOWN WAS COMPLETED ON THE MAIN LANDING GEAR. AS THE NOSE LANDING GEAR TOUCHED DOWN, THE OLEO STRUT OUTER CYLINDER FAILED. THE STRUT, TRUNNION, AXLE AND WHEEL SEPARATED FROM THE AIRCRAFT AND TRAVELED AFT UNDER THE FUSELAGE, DOING EXTENSIVE DAMAGE. THE AIRCRAFT SKIDDED TO A STOP ON THE MAIN WHEELS AND THE FORWARD FUSELAGE STRUCTURE. A SMALL HYDRAULIC FLUID FIRE OCCURRED IN THE NOSE WHEEL WELL BUT WAS EXTINGUISHED BY THE FIRE-FIGHTING CREW. THE CREW EGRESSED WITHOUT INJURY; HOWEVER, THE AIRCRAFT SUSTAINED SUBSTANTIAL DAMAGE.

## PINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. DURING MANUFACTURE OR OVERHAUL OF THE OUTER CYLINDER, PN 3G61090-115 (MANUFACTURED FROM 4340 ALLOY), THE GRINDING PROCESS USED ALLOWED SHALLOW CRACKING TO DEVELOP IN THE BASE METAL. FINDING 2. DEPOT LEVEL TCTO 1C-141A-1431 WAS ISSUED TO SWAP OUT 4340 ALLOY STEEL OUTER CYLINDERS WITH 300M ALLOY STEEL CYLINDERS. FINDING 3. TCTO 1C-141A-1431 WAS ACCOMPLISHED ON THE ACCIDENT AIRCRAFT AND PROPERLY DOCUMENTED ON THE AFTO FORM 95 PRIOR TO FEBRUARY 1973. FINDING 4. DURING AN ENROUTE STOP, IN FEBPUARY 1973, THE NOSE LANDING GEAR WAS ROUTINELY REPLACED WITH A LANDING GEAR THAT HAD A 4340 ALLOY STEEL OUTER CYLINDER. FINDING 5. CAUSE. LOGISTICS FACTOR, SUPERVISION (DIRECT). MAINTENANCE SUPERVISORS AT THE ENROUTE STOP FAILED TO INSURE THAT PROPER FORMS WERE COMPLETED SO THAT THE DECOMPLIANCE WITH TCTO 1C-141A-1431 WOULD BE DOCUMENTED ON THE AFTO FORM 95. FINDING 6. CAUSE. LOGISTICS FACTOR, SUPERVISION (DIRECT). MAINTENANCE SUPERVISORS AT THE AIRCRAFT'S HOME STATION FAILED TO COMPLY WITH A COMMAND DIRECTIVE, ISSUED IN JANUARY 1974, DIRECTING UNITS TO PHYSICALLY INSPECT LANDING GEAR CONFIGURATION TO INSURE THAT THE CORRECT CONFIGURATION WAS DOCUMENTED IN THE AFTO FORM 95. FINDING 7. THE SHALLOW CRACKING INTRODUCED IN THE BASE METAL DURING GRINDING LED TO STRESS CORROSION PROPAGATION WHICH RESULTED IN COMPLETE STRUT FAILURE DURING LANDING AND SUBSTANTIAL DAMAGE TO THE AIRCRAFT.

#### 760603002

CLASS A DEST MAC C141A 66000131 ACFT DAMAGE - CLASS A 0000117544
INJURY CLASS - NONE PHASE OF OPR - LANDING-ROLL
DESCRIPTION - COMBUST/FIRE-HYDRL
SYSTEM ACTUATOR-LDG GEAR NOSE GEAR
UNSAFE ACT - LANDED GEAR UP OR RAISED GEAR
BASIC CAUSE - IMPROPERLY INSTALLED
BASE OF ASSGN - CHARLESTON AFB S C NEAR BASE - NAPOLI O1 FHG ITAL
SEY-CODE 1 - G45 SEY-CODE 2 WORK UNIT CODE -13BAW

# diff . LIMER

LANDED WITH NLG UP, UPLOCK BELLCRANK

#### DESCRIPTION

C-141A. THE AIRCRAFT WAS LANDING AT THE DESTINATION BASE AFTER A SPECIAL ASSIGNMENT AIRLIFT MISSION. THE LANDING GEAR LEVER HAD BEEN PLACED DOWN, AND ALL LANDING GEAR INDICATORS INDICATED THE LANDING GEAR WAS DOWN AND LOCKED. THE AIRCRAFT TOUCHDOWN WAS NORMAL UNTIL THE NOSE FELL THROUGH AND CONTACTED THE RUNWAY. THE AIRCRAFT SLID TO A STOP ON THE RUNWAY. THE LANDING SLIDE RESULTED IN SUBSTANTIAL DAMAGE TO THE LOWER FUSELAGE AND RUPTURE OF HYDRAULIC FLUID LINES IN THE NOSE WHEEL WELL AREA WHICH SUBSEQUENTLY IGNITED. THE 68 PASSENGERS AND 9 CREW MEMBERS EGRESSED WITH MINIMAL INJURIES EXCEPT FOR ONE PASSENGER WHOSE EMOTIONAL INCAPACITY WAS CLASSIFIED AS A MAJOR INJURY.

#### FINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. THE DESIGN OF THE NOSE LANDING GEAR (NLG) POSITION INDICATING SYSTEM IS DEFICIENT IN THAT THERE IS NO POSITIVE NLG DOWN POSITION SWITCH. FINDING 2. CAUSE. LOGISTICS FACTOR, EQUIPMENT MAINTENANCE. DURING INSTALLATION OF THE NLG ACTUATOR FITTING PN 3G61245-101, MAINTENANCE PERSONNEL INFLICTED DAMAGE TO THE FITTING RESULTING IN PENETRATION OF THE PROTECTIVE COATING/PLATING TO THE BASE METAL. FINDING 3. THE DAMAGE (NICK) TO THE FITTING PROVIDED A LOCALIZED STRESS CONCENTRATION RESULTING IN PROGRESSIVE STRESS CORROSION CRACKING UNTIL THE FAILURE OF THE FITTING. FINDING 4. FAILURE OF THE FITTING RESULTED IN THE GEAR UP-DOWN LOCK REMAINING ENGAGED AND THE UP-DOWN LOCK SWITCH REMAINING CLOSED WHEN THE LANDING GEAR HARDLE WAS PLACED IN THE DOWN POSITION. FINDING 5. AS A RESULT OF THE ACTUATOR FAILURE AND THE DEFICIENT GEAR POSITION INDICATING SYSTEM, THE CREW WAS LED TO BELIEVE THE NOSE GEAR WAS DOWN AND LOCKED WHICH SUBSEQUENTLY RESULTED IN A NLG-UP LANDING. FINDING 6. SCRAPING OF THE LOWER SURFACE OF THE AIRCRAFT ON THE RUNWAY, COMBINED WITH A SUBSEQUENT HYDRAULIC AND/OR ELECTRICAL WIRE INSULATION FIRE, RESULTED IN SUBSTANTIAL DAMAGE TO THE AIRCRAFT. FINDING 7. THE 68 PASSENGERS AND 9 CREW MEMBERS SUCCESSFULLY EGRESSED THE AIRCRAFT; HOWEVER, THE EGRESS WAS HAMPERED BY THE DENSE SMOKE IN THE COCKPIT AND FORWARD CARGO COMPARTMENT, DIFFICULTY ENCOUNTERED WITH REMOVAL OF THE EMERGENCY EXIT AND DIFFICULTY IN DEPLOYING THE ESCAPE ROPE. FINDING 8. ONE PASSENGER SUFFERED EMOTIONAL INCAPACITY, LATER CLASSIFIED AS A MAJOR INJURY.

760823001

CLASS A DEST MAC C141A 67000006 ACFT DAMAGE - CLS A DST 0008289640 INJURY CLASS - FATAL PHASE OF OPR - CRUISE-DESCENT DESCRIPTION -SYSTEM N.E.C. (AIRFRAME) UNSAFE ACT - FAIL TO DIVERT ALTERNATE FIELD BASIC CAUSE -BASE OF ASSGN - MCGUIRE AFB N J NEAR BASE - MILDENHALL RAF UNK SEY-CODE 1 - U132A SEY-CODE 2 - R113

WORK UNIT CODE -

ACFT 1 LINER T-STORMS, RADAR INOP, WING BROKE OFF

#### DESCRIPTION

C-141A. THE AIRCRAFT WAS ON AN AIRLIFT MISSION TO AN OVERSEAS BASE. THE DESTINATION WEATHER FORECAST CALLED FOR INTERMITTENT CUMULONIMBUS CLOUDS BUT DID NOT SPECIFY THUNDERSTORMS. DURING CLIMBOUT FROM THE DEPARTURE BASE. THE AN/APN-59B SEARCH RADAR FAILED. TWO HOURS OUT OF DESTINATION, THE COGNIZANT USAF AERONAUTICAL RADIO STATION RELAYED A DESTINATION WEATHER FORECAST WHICH INDICATED INTERMITTENT THUNDERSTORMS. ABOUT 1 HOUR OUT OF DESTINATION, THE AIRCREW REQUESTED A PHONE PATCH WITH THE MAINTENANCE, THE CALL COULD NOT BE COMPLETED; HOWEVER, A PHONE PATCH WAS COMPLETED TO A WEATHER STATION SEVERAL HUNDRED MILES AWAY. THIS STATION INDICATED THE DESTINATION BASE WAS WITHIN AN AREA OF FOUR-EIGHTHS THUNDERSTORM COVERAGE WITH TOPS TO 26,000 FEET. ABOUT 40 MINUTES OUT, AND PRIOR TO COMMENCING DESCENT, THE AIRCREW ADVISED THE HOST NATION ATC RADAR FACILITY THAT THEIR AIRBORNE RADAR HAD FAILED AND REQUESTED RADAR VECTORS AROUND ANY THUMDERSTORMS. THE ATC AGENCY ADVISED, AFTER EXPERIENCING A TEMPORARY PRIMARY RADAR FAILURE, THAT THERE WAS A 'PRETTY SOLID COVER' BETWEEN THE AIRCRAFT AND THE DESTINATION AND STATED, 'THERE'S NO WAY I CAN GET YOU AROUND IT.' THE AIRCREW INDICATED THEY WERE IN VISUAL METEOROLOGICAL CONDITIONS WITH GROUND CONTACT AND WOULD VISUALLY CIRCUMNAVIGATE THE THUNDERSTORMS. TWO MINUTES LATER, THE AIRCRAFT FAILED TO RESPOND TO A TRANSPONDER CHANGE. THE AIRCRAFT BROKE APART IN FLIGHT, WENT OUT OF CONTROL AND CRASHED. THE 14 CREW MEMBERS AND 4 PASSENGERS PERISHED IN THE CRASH.

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# EDITINGS

C-141A. FINDING 1. THE AIRCRAFT SEARCH RADAR (AN/APN 59B) FAILED DURING THE CLIMB OUT OF THE DEPARTURE BASE. FINDING T. WEATHER UPDATES FOR THE DESTINATION AREA, RECEIVED BY THE AIRCREW WHILE EN ROUTE, ADVISED THAT THUNDERSTORMS WERE IN PROGRESS AND FORECAST FOR THE AIRCRAFT'S ESTIMATED TIME OF ARRIVAL. FINDING 3. THE GROUND RADAR CONTROLLER ADVISED THE AIRCREW THAT HE COULD NOT PROVIDE VECTORS THROUGH OR AROUND THE WEATHER. FINDING 4. CAUSE. OPERATIONS FACTOR, OPERATOR. THE AIRCREW DID NOT FULLY COMPLY WITH AFR 60-16/MAC SUP 1 IN THAT THEY PROCEEDED TOWARD THE DESTINATION BASE THROUGH A WEATHER BAND IN WHICH THEY WERE UNABLE TO MAINTAIN THE RECOMMENDED CLEARANCE FROM THUNDERSTORM CELLS. FINDING 5. AS A RESULT, THE AIRCRAFT PRODUNTERED EXTREME TURBULENCE WHICH FAILED THE NUMBER 4 PYEN AND RIGHT WING. FINDING 6. THE FAILURE OF THE RIGHT MING, AND RESULTING UNSTABLE AERODYNAMIC CONFIGURATION, RESULTED IN RAPID SEPARATION OF THE REMAINING THREE ENGINES, THE HORIZONTAL STABILIZER AND THE UPPER HALF OF THE VERTICAL STABILIZER. FINDING 7. THE AIRCRAFT AND CARGO WERE DESTROYED BY FIRE AND GROUND IMPACT. FINDING 8. NIL 14 CREW MEMBERS AND THE 4 PASSENGERS WERE FATALLY THE CRASH.

# E : 1001

ELL A BERF MAC CLARA 67000008 ACFT DAMAGE - CLS A DST 0007156521
ELLER CLARS - FATAL PHASE OF OPR - LANDING-ROLL
ELSCRIPTION -

2:5122

UNSAFE ACT - ATTEMPTED FLT POOR PHYS COND

B: 1 C CAUSS -

EASS OF RESGN - MCGUIRE AFB N J NEAR BASE - SONDRESTROM ABS GR

SHY-CODE 1 - L77 SEY-CODE 2 -

WORK UNIT CODE -

# ACFT 1 LINER

HEAVY, HOT, STALLED TRYING TO GO AROUND

## DESCRIPTION

C-141A. THE ACCIDENT AIRCRAFT WAS ON AN AIRLIFT MISSION TO AN OVERSEAS BASE. ON THE PREVIOUS DAY, THE AIRCRAFT HAD FLOWN FROM HOME BASE TO THE OVERSEAS DESTINATION BASE AND REMAINED OVERNIGHT. ON THE DAY OF THE ACCIDENT, THE AIRCRAFT TOOK OFF, FLEW TO AN EN ROUTE BASE, AND AFTER LANDING, ROLLED ON THE RUNWAY FOR 1,500 TO 2,000 FEET WITH THE NOSEGEAR NOT CONTACTING THE RUNWAY. THE AIRCRAFT THEN PITCHED UP STEEPLY, ROLLING TO THE RIGHT THEN BACK TO THE LEFT AND TURNING 10 DEGREES TO THE LEFT. THE LEFT WING TIP THEN CONTACTED THE RUNWAY 4,050 FEET DOWN THE RUNWAY, BREAKING OFF 12 FEET OF THE WING TIP. THE SPILLING FUEL RESULTED IN A LEFT WING FIRE. THE LEFT MAIN GEAR AND RAMP CONTACTED THE RUNWAY AND THEN CONTINUED OFF THEN LEFT SIDE ONTO THE UNSTABILIZED AREA. THE RIGHT MAIN GEAR THEN CONTACTED THE RUNWAY AND THE AIRCRAFT EXITED THE RUNWAY AND THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4) FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

BECAME ALBEORNE, DRAGGING THE RIGHT WING TIP AND THE NUMBER A LIGHT WE WACELLE FOR 150 FEET. THE AIRCRAFT CONTINUED ATHRORNE FOR 500 FEET AND TURNED RIGHT UNTIL THE RIGHT WING TIP CONTACTED THE LEFT SIDE OF THE RUNWAY. THIS BROKE THE RIGHT WING AND CAUSED SPILLED FUEL WHICH CAUGHT FIRE. THE AIRCRAFT THEN IMPACTED THE RUNWAY ON THE NUMBERS 3 AND 4 ENGINE MACELLES, RIGHT MAIN GEAR AND NOSEGEAR, EXITED THE RIGHT SIDE OF THE RUNWAY AT 6,750 FEET, BECAME AIRBORNE MOMENTARILY AS IT CROSSED A DRAINAGE DITCH, AND THEN IMPACTED ON ITS NOSE, TELESCOPING THE FORWARD FUSELAGE WITH THE RADOME. THE AIRCRAFT CONTINUED BREAKING UP AND THE MAIN FUSELAGE SLID TO A STOP, ENVELOPED IN FLAMES. THE AIRCRAFT WAS TOTALLY DESTROYED. SEVEN OF THE EIGHT CREW MEMBERS RECEIVED FATAL INJURIES, THE EIGHTH SUSTAINING MAJOR BURN INJURIES AND FRACTURES. THIRTEEN OF THE NINETEEN PASSENGERS PERISHED IMMEDIATELY, AND TWO CHORE SUCCUMBED WITHIN 14 DAYS OF THE ACCIDENT.

#### FINDINGS

C-141A. FINDING 1. CAUSE. OPERATIONS FACTOR, SUPERVISION (INDIRECT). OPERATIONS SUPERVISORS USED POOR JUDGMENT IN SCHEDULING AN INEXPERIENCED COPILOT WITH A RECENTLY UPGRADED AC. FINDING 2. CAUSE. OPERATIONS FACTOR, OTHER CREW MEMBER. THE COPILOT DID NOT GET ADEQUATE CREW REST ALTHOUGH HE WAS AFFORDED THE OPPORTUNITY IN ACCORDANCE WITH AFR 60-1. FINDING 3. CAUSE. OPERATIONS FACTOR, SUPERVISION (DIRECT). THE AC DID NOT ENSURE THAT HIS COPILOT OBTAINED ADEQUATE CREW REST. FINDING 4. DURING LANDING ROLL, THE AC EXPERIENCED A VISUAL ILLUSION, MISTOOK THE CREST OF THE RUNWAY AS THE END OF THE RUNWAY AND INITIATED A GO-AROUND. FINDING 5. CAUSE. OPERATIONS FACTOR, OPERATOR. THE AC USED INCORRECT GO-AROUND TECHNIQUE IN THAT AIRCRAFT PITCH ATTITUDE WAS INCREASED PRIOR TO APPLICATION OF POWER. FINDING 6. AS A RESULT OF HIS INEXPERIENCE AND INADEQUATE CREW REST, THE COPILOT WAS UNABLE TO EFFECTIVELY ASSIST THE AC IN CORRECTLY EXECUTING THE GO-AROUND. FINDING 7. THE AIRCRAFT ASSUMED AN EXTREME NOSE-HIGH ATTITUDE, RESULTING IN AIRCRAFT LIFTOFF AND SUBSEQUENT STALL. FINDING 8. THE AIRCRAFT STRUCK THE RUNWAY, LEFT WING TIP FIRST, CAUGHT FIRE, DEPARTED THE RUNWAY AND WENT OUT OF CONTROL. FINDING 9. THE AIRCRAFT WAS TOTALLY DESTROYED; 7 CREW MEMBERS AND 15 PASSENGERS SUSTAINED FATAL INJURIES, THE OTHER CREW MEMBER SUSTAINING MADOR INJURIES.

770630002

CLASS A DEST MAC C141A 67000007 ACFT DAMAGE - CLASS A 0000624082 INJURY CLASS - NONE PHASE OF OPR - PARKED DESCRIPTION - COMBUST/FIRE-HYDRL SYSTEM SKIDS UNSAFE ACT - N.E.C. BASIC CAUSE - IMPROP MANUFACTURED BASE OF ASSGN - NORTON AFB CAL NEAR BASE - TWENTYNINE PALMS M SEY~CODE 1 - G53 SEY-CODE 2 -WORK UNIT CODE -13BDJ

ACFT 1 LINER

AFTER LDG, MLG HYD SWIVEL FAILED, FIRE

#### DESCRIPTION

C-141A. THE MISHAP AIRCRAFT HAD DEPARTED HOME BASE AND PROCEEDED TO AN ENROUTE AIRFIELD WITHOUT INCIDENT. DURING ENGINE SHUT DOWN, A VAPOR CLOUD AND THEN FLUID WERE OBSERVED RUNNING ONTO THE RAMP IN THE VICINITY OF THE NUMBER 5 AND 6 WHEELS. THIS SIGHTING WAS FOLLOWED THE STATELY BY IGNITION AND A FIRE. THE FIRE DEPARTMENT AMPRIVED ON THE SCENE APPROXIMATELY 1 MINUTE AFTER THE FIRE STARTED AND EXTINGUISHED THE FIRE. THE AIRCREW EGRESSED WITHOUT INJURY. THE AIRCRAFT SUSTAINED SUBSTANTIAL DAMAGE.

#### PINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. THE HYDRAULIC LFUID (MIL-H-5606) IS CONSIDERED DESIGN DEFICIENT IN THAT THE FLASH POINT (200 DEGREES F) AND THE AUTO-IGNITION TEMPERATURE (468 DEGREES F) OF THE FLUID ARE TOO LOW FOR AIRCRAFT USE. FINDING 2. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. THE BRAKE SWIVEL (PART MUMBER AE 95 223G) IS CONSIDERED DESIGN DEFICIENT IN THAT THE FERRULE SWAGE WILL BREAK LOOSE FROM REPEATED TORQUING, OVERTORQUING, OR HIGH ENERGY VIBRATIONS AND IMPACT LOADS; AND ONCE THE FERRULE SWAGE IS DEGRADED, THE BRAKE SWIVEL WILL SEPARATE FROM THE BRAKE ASSEMBLY. FINDING 3. CAUSE. LOGISTICS FACTOR, UNDETERMINED. THE FERRULE SWAGE WAS WEAKENED FOR UNDETERMINED REASONS, POSSIBLY DUE TO: (1) MARSINAL SWAGING. (2) OVERTORQUING OF THE JAM NUT. (3) REPEATED RETORQUING OF THE JAM NUT. (4) ANY COMBINATION OF (1), (2), AND (3). FINDING 4. AS A RESULT OF THE BRAKE SWIVEL DESIGN DEFICIENCY, THE WEAKENED FERRULE SWAGE BROKE MOOSE AND SEPARATED FROM THE BRAKE ASSEMBLY AFTER THE AIRCRAFT LANDED ON AN UNIMPROVED SURFACE (AM-2 MATTING) AND ENTRGENCY PRAKES WERE APPLIED TO SET THE PARKING BRAKE. PALANING 5. AS A RESULT, HYDRAULIC PRESSURE FORCED HORAULIC FLUID THROUGH THE SEPARATION AND ONTO THE NUMBER FINDING 6. AS A RESULT OF THE DESIGN THE BRAKE TEMPERATURE ANDER THE AUTO-IGNITION TEMPERATURE OF THE HYDRAULIC FIGURE, AND THE HYDRAULIC FLUID BEGAN TO BURN. FINDING 7. THE RESULTING FIRE WAS EXTINGUISHED BY THE FIRE DEPARTMENT NETER SUBSTANTIAL DAMAGE HAD OCCURRED. FINDING 8. THE THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)

FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

OI NOT 1988 LIGGREM EGRESSED THE AIRCRAFT WITHOUT INJURY.

# 771031002

CLASS A DEST MAC C141A 64000614 ACFT DAMAGE - CLASS A 0000382677

INJURY CLASS - NONE PHASE OF OPR - TAKEOFF-INIT CLIMB

DESCRIPTION - IGN SOURCES-ENGINES

SYSTEM TURBINE CASE (OUTER)

UNSAFE ACT - GAVE INADEQ OR INCORRECT INFO

BASIC CAUSE - INTENTIONAL SHUTDOWN

BASE OF ASSGN - NORTON AFB CAL NEAR BASE - RICHMOND ABS AUSTL

SEY-CODE 1 - 160 SEY-CODE 2 
WORK UNIT CODE -23EAO

ACFT 1 LINER

#3 ENG EXPLOSION, 3RD TURB WHELL FAILED

#### DESCRIPTION

C-141A. THE MISHAP AIRCRAFT WAS ON A ROUTINE AIRLIFT MISSION. APPROXIMATELY 16 SECONDS AFTER TAKEOFF, AN EXPLOSION OCCURRED IN THE NUMBER 3 ENGINE. DEBRIS FROM THE ENGINE TURBINE SECTION PENETRATED THE NUMBER 4 ENGINE, CAUSING IT TO FAIL. A PIECE OF THE NUMBER 3 TURBINE DISK PENETRATED THE FUSELAGE AND ENTERED A PALLETIZED CONTAINER, CAUSING A CARGO FIRE. THE CREW MADE A TWO-ENGINE RECOVERY BACK TO THE DEPARTURE BASE, AND ALL OCCUPANTS GROUND-EGRESSED WITH NO SIGNIFICANT INJURIES. THE CARGO FIRE WAS EXTINGUISHED BY CRASH/RESCUE PERSONNEL; HOWEVER, THE AIRCRAFT SUSTAINED SUBSTANTIAL DAMAGE.

## FINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, SUPERVISION (INDIRECT). THE CRITERIA FOR ACCOMPLISHMENT OF TCTO 2J-TF33-645, WHICH CALLED FOR INSPECTION OF 3D STAGE DISKS TO DETERMINE IF CRACKS EXISTED, WAS INADEQUATE TO ENSURE THAT THE INSPECTIONS WERE ACCOMPLISHED IN A TIMELY MANNER. FINDING 2. CAUSE. LOGISTICS FACTOR, SUPERVISION (INDIRECT). MAC AND AFLC LOGISTICS SUPERVISORS FAILED TO ESTEBLISH ADEQUATE ACCOMPLISHMENT TRACKING AND RECONCILLIATION TO ENSURE THAT THE TCTO WAS COMPLETED IN A THELY MANNER. FINDING 3. AS A RESULT, THE INSPECTION/REPLACEMENT OF THE 3D STAGE TURBINE DISK OF THE NUMBER 3 ENGINE HAD NOT BEEN ACCOMPLISHED. FINDING 4. DURING TAKEOFF, THE 3D STAGE TURBINE DISK OF THE NUMBER 3 HINGINE FAILED CATASTROPHICALLY DUE TO LOW CYCLE FATIGUE CRACKS ORIGINATING IN THE TIE BOLT HOLES. FINDING 5. FRAGMENTS OF THE NUMBER 3 TURBINE DISK CAUSED THE FAILURE OF THE NUMBER 4 ENGINE, AND DAMAGED THE FUSELAGE AND UNDERWING AREAS. A LARGE PORTION OF THE DISK PENETRATED THE CARGO COMPARTMENT, STARTING A FIRE. FINDING 6. THE AIRCRAFT WAS RECOVERED SAFELY BUT SUSTAINED SUBSTANTIAL DAMAGE. THE AIRCREW AND PASSENGER GROUND-EGRESSED WITHOUT SIGNIFICANT INJURY.

THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)
FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

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21 NCV 1988

7911.18002

CLASS A DEST MAC C141A 64000627 ACFT DAMAGE - CLASS A 0002184190 INJURY CLASS - NONE PHASE OF OPR - TAXIING-TAKEOFF

DESCRIPTION -

SYSTEM DOWN LOCK MAIN GEAR

BUSAFE ACT - ACTIVATED GEAR CTLS ACCIDENTLY

BASIC CAUSE -

SASE OF ASSGN - MCGUIRE AFB N J NEAR BASE - POINT MUGU CTY CAL

SEY-CODE 1 - U132A SEY-CODE 2 -

WORK UNIT CODE -

ACFT 1 LINER

UNINTENTIONAL GEAR RETRACTION

# DESCRIPTION

C-141A. THE MISHAP AIRCRAFT WAS SCHEDULED FOR AN AIRLIFT MISSION. WHILE THE AIRCRAFT WAS BEING TAXIED FOR TAKEOFF, THE MAIN GEAR FOLDED AND THE AIRCRAFT SETTLED TO THE TAXIWAY. THE ENGINES WERE SHUT DOWN AND THE CREW AND PASSENGER DEPLANED, UNINJURED. THE AIRCRAFT SUSTAINED SUBSTANTIAL DAMAGE.

#### FINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. THE DESIGN OF THE LANDING GEAR LEVER LOCK ARM ASSEMBLY IS INADEQUATE; IN THAT IT WILL NOT ENSURE A POSITIVE LOCK OF THE LANDING GEAR CONTROL LEVER. FINDING 2. CAUSE. OPERATIONS FACTOR, OPERATOR. WHILE TAXIING, THE PILOT INADVERTENTLY BUMPED THE LANDING GEAR LEVER TO THE UP FOSITION WHEN HE ATTEMPTED TO REPOSITION THE BRAKE SELECTOR SWITCH FROM THE EMERGENCY TO THE NORMAL POSITION.

1APATIENCE AND INADEQUATE CREW COORDINATION CONTRIBUTED TO THIS ERROR. FINDING 3. THE PILOT IMMEDIATELY PLACED THE 1 ABOING GEAR LEVER BACK DOWN, BUT THE MAIN GEAR CONTINUED TO FOLD AND THE AIRCRAFT SETTLED TO THE TAXIWAY, SUSTAINING MAJOR DANAGE. THERE WERE NO PERSONNEL INJURIES.

#### 796908002

CLASS A DEST MAC C141A 64000647 ACFT DAMAGE - CLS A DST 0007172924
INJURY CLASS - NONE PHASE OF OPR - LANDING-ROLL
BESCRIPTION - COMBUST/FIRE-HYDRL
SYSTEM COCKPIT CONTROL NOSE GEAR
UNSAFE ACT - LANDED GEAR UP OR RAISED GEAR
BASIC CAUSE - FAIL OPER/FUNCT
MASE OF ASSGN - CHARLESTON AFB S C NEAR BASE - CHARLESTON AFB S C
SEY-CODE 1 - G45 SEY-CODE 2 - G47
ROSK UNIT CODE -13CAA

COTT L LINER

GEAR SYS WALF, NLG COLLAPSED, FIRE DAMAGE

THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)
FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

#### DESCRIPTION

C-141A. THE MISHAP AIRCRAFT WAS ON A NIGHT, LOCAL TRAINING MISSION. DURING THE FINAL APPROACH FOR A FULL-STOP LANDING, THE 'BRAKE RELEASE' LIGHT WAS NOT ILLUMINATED, AND THE NORMAL BRAKE PRESSURE INDICATED ZERO. THE EMERGENCY BRAKE PRESSURE WAS CHECKED AND FOUND TO BE WITHIN LIMITS. THE CREW DETERMINED THAT NORMAL BRAKING SYSTEM PRESSURE AND QUANTITY WERE GOOD, AND THE LANDING WAS CONTINUED. ON AIRCRAFT TOUCHDOWN, THE COPILOT ATTEMPTED TO DEPLOY THE SPOILERS, BUT THEY IMMEDIATELY RETRACTED. ALL FOUR THROTTLES WERE MOVED TO THE REVERSE POSITION BUT NUMBER 4 ENGINE WAS THE ONLY ENGINE THAT PROVIDED REVERSE THRUST. (THIS WAS LATER FOUND TO BE A MALFUNCTION OF THE NUMBER 4 REVERSING SYSTEM.) THE PILOT DEPRESSED THE BRAKES AND DISCOVERED HE HAD NO NORMAL BRAKING. EMERGENCY BRAKING WAS SELECTED BUT ALSO FAILED TO SLOW THE AIRCRAFT. WITH APPROXIMATELY 4,000 FEET OF RUNWAY REMAINING, THE NOSE GEAR RETRACTED. AND THE NOSE OF THE AIRCRAFT SETTLED TO THE RUNWAY. THE AIRCRAFT VEERED TO THE RIGHT AND STOPPED ON THE RUNWAY WITH 820 FEET OF THE RUNWAY REMAINING. THE ENGINES WERE SHUT DOWN, AND THE SIX CREWMEMBERS EGRESSED FROM THE AIRCRAFT. THE AIRCRAFT WAS DESTROYED BY FIRE; THERE WERE NO PERSONNEL INJURIES.

# FINDINGS

C-141A. FINDING 1. CAUSE. LOGISTICS FACTOR, SUPERVISION (INDIRECT). C-141 MAINTENANCE PROCEDURES DO NOT ENSURE REPLACEMENT OF THE NOSE LANDING GEAR SELECTOR VALVE PRIOR TO ITS BECOMING EXCESSIVELY WORN INTERNALLY. FINDING 2. AS A RESULT, THE SELECTOR VALVE OF THE MISHAP AIRCRAFT REMAINED IN SERVICE UNTIL INTERNAL LEAKAGE BECAME EXCESSIVE. FINDING 3. CAUSE. LOGISTICS FACTOR, EQUIPMENT FAILURE. THE NUMBER 3 SWITCH IN THE LANDING GEAR CONTROL FAILED INTERNALLY, PREVENTING NORMAL BRAKE, GROUND SPOILER, AND THRUST REVERSE OPERATIONS. FINDING 4. THE PROBLEM IN THE MANDING GEAR CONTROL ALSO RESULTED IN POWERING OF BOTH SIDES OF THE NOSE LANDING GEAR SELECTOR VALVE, WHICH, WHEN COMBINED WITH THE EXCESSIVE INTERNAL LEAKAGE, RESULTED IN ERRATIC AND UNRELIABLE OPERATION OF THE SELECTOR VALVE AND THE NORMAL WHEEL BRAKES. FINDING 5. AS A RESULT OF THE GEAR CONTROL AND SELECTOR VALVE PROBLEMS, THE CREWMEMBERS EMPERIENCED COMPLEX PROBLEMS WITH THE SPOILERS, THRUST REVERSE SYSTEM, AND BRAKES ON LANDING, AND THEY THEN ACCEMPTED SIMULTANEOUS OPERATION OF THE SPOILERS AND THE EMERGENCY BRAKES. FINDING 6. THE SIMULTANEOUS USE OF SHOTLERS AND EMERGENCY BRAKES PLACED EXCESSIVE DEMANDS ON THE NUMBER 3 HYDRAULIC SYSTEM, RESULTING IN A LACK OF EMPECTIVE BRAKING. FINDING 7. THE ERRATIC OPERATION OF THE NOSE GEAR SELECTOR VALVE RESULTED IN RETRACTION OF THE MOSE GEAR AT HIGH LANDING ROLL SPEED, AND THE NOSE OF THE AIRCRAFT FELL TO THE RUNWAY. FINDING 8. THE AIRCRAFT SKIDDED TO A STOP AND A HYDRAULIC FIRE ERUPTED IN THE NOSE LANDING GEAR AREA. FINDING 9. THE CREWMEMBERS EGRESSED WITHOUT INJURIES; THE FIRE WAS SUSTAINED BY THE ON-BOARD

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A STATE OF THE PARTY OF

21 NOV 1988
OXYGEN SYSTEM, AND THE AIRCRAFT WAS DESTROYED.

790921001

CLASS A DEST MAC C141A 65000260 ACFT DAMAGE - CLASS A 0002161679 INJURY CLASS - NONE PHASE OF OPR - LANDING-ROLL

DESCRIPTION -

SYSTEM

UNSAFE ACT - LANDED GEAR UP OR RAISED GEAR

BASIC CAUSE -

BASE OF ASSGN - TRAVIS AFB CAL NEAR BASE - TRAVIS AFB CAL

SEY-CODE 1 - M85 SEY-CODE 2 -

WORK UNIT CODE -

ACFT 1 LINER

UNINTENTIONAL GEAR RETRACTION DURING TAG

#### DESCRIPTION

C-141A. THE MISHAP AIRCRAFT WAS ON A LOCAL TRAINING FLIGHT WHICH INCLUDED INSTRUMENT APPROACHES AND TOUCH-AND-GO LANDINGS. DURING THE SEVENTH TOUCH-AND-GO LANDING, WHILE THE AIRCRAFT WAS ON THE RUNWAY, BOTH MAIN LANDING GEAR RETRACTED. THE NOSE GEAR REMAINED EXTENDED. THE TAKEOFF WAS DISCONTINUED, AND THE AIRCRAFT SLID TO A STOP ON THE RUNWAY. THE ENGINES WERE SHUT DOWN, AND THE CREWMEMBERS EVACUATED THE AIRCRAFT. THERE WERE NO PERSONNEL INJURIES.

#### PIND NGS

C-141A. FINDING 1. THE C-141 LANDING GEAR LEVER LOCK SYSTEM WAS DESIGNED IN ACCORDANCE WITH SPECIFICATIONS WHICH ALLOW THE HANDLE TO BE RAISED WHILE THE AIRCRAFT IS ON THE GROUND AND THE STRUTS ARE ONLY PARTIALLY EXTENDED. FINDING 2. CAUSE. OPERATIONS FACTOR, OPERATOR. DURING A TOUCH-AND-GO LANDING, WITH THE STRUTS PARTIALLY EXTENDED, THE INSTRUCTOR PILOT (IP) INADVERTENTLY RAISED THE LANDING GEAR HANDLE. INATTENTION CONTRIBUTED TO THIS ERROR. FINDING 3. THE IP IMMEDIATELY PLACED THE HANDLE BACK DOWN, BUT THE MAIN GEAR CONTINUED THE UPWARD CYCLE WHICH HAD BEEN INITIATED; THE NOSE GEAR UNLOCKED, BUT REMAINED DOWN. FINDING 4. THE AIRCRAFT SETTLED TO THEE RUNWAY AND SKIDDED TO A STOP, SUSTAINING MAJOR DAMAGE. FINDING 5. THE CREWMEMBERS DEPLANED UNINJURED.

- 111-101

TABLE A NDES MAC C141A 64000621 ACFT DAMAGE - CLASS A 0000356000 TABLE TLASS - NONE PHASE OF OPR - LANDING-FLARE

PESCHIPTION -

SYSTEM INTERPHONE SYS

UNSAFE ACT - FAILED TO USE CHECKLIST

BASIC CAUSE - AUDIO FAULTY

BASE OF ASSGN - MCGUIRE AFB N J NEAR BASE - MCGUIRE AFB N J

SEY-COME 1 - L80 SEY-CODE 2 -

WORK UNIT CODE -

# ACFT L LINER

11. RED GEAR-UP, SCRPAED RNWY ON GO-AROUND

# DESCRIPTION

C-141A. THE AIRCRAFT WAS ON A NIGHT, LOCAL TRAINING MISSION. AFTER FLYING FIVE APPROACHES, THE CREW MADE A TUCL-STOP LANDING AND A CREW POSITION CHANGE. ON THE NEXT TAKEOFF, AN ENGINE FAILURE WAS SIMULATED, AND THE AIRCRAFT WAS RADAR-VECTORED FOR A PRECISION RADAR APPROACH WITH A PLACHED APPROACH FLAP (75 PERCENT FLAP) TOUCH-AND-GO LANDING. ON THE TURN TO DOGLEG, THE INSTRUCTOR AIRCRAFT COMMANDER (IAC) EXPERIENCED INTERPHONE DIFFICULTY AND PASSED CONTROL OF THE RADIOS TO THE PILOT. THE PILOT CONTINUED THE APPROACH WHILE THE IAC RESOLVED THE INTERPHONE MALFUNCTION. THE PROBLEM WAS CORRECTED ON SHORT FINAL AND THE IAC MUNDUNCED GLOC ABOVE' MINIMUM AND CLAND.' AS THE AIRCRAFT TIRE OF THE LANDING, THE PILOT AND ENGINEER NOTICED THAT MARLEN NO MEAR WAS NOT DOWN. THE PILOT ACCOMPLISHED A CONTACTED THE AIRCRAFT FUSELAGE CONTACTED THE RUNWAY MINURE THE CLIMB BEGAN. THE CREW ASSESSED THE DAMAGE. BE STORD AND PINNED THE LANDING GEAR, AND JETTISONED 20,000 FOUNDS OF FUEL PRIOR TO MAKING AN UNEVENTFUL LANDING. THE ATROCRAFT SUSTAINED SUBSTANTIAL STRUCTURAL DAMAGE. THERE THE HO GUNRIES.

# FINDLNGS

CHI41A. FINDING 1. THE FLIGHT MANUAL WAS CHANGED TO PERMIT GFLAPS APPROACH' LANDINGS ON A REGULAR BASIS. ALLOWING CREWS TO SILENCE THE AURAL GEAR WARNING, WHICH THEY COULD NOT DO WITH CLANDING FLAPS' SELECTED. FINDING 2. THE CREW INHIBITED THE GROUND PROXIMITY WARNING SYSTEM (GPWS) BECAUSE OF FALSE WARNINGS, DENYING THEMSELVES THE PROTECTION OF THE AURAL GEAR-UP WARNING FEATURE OF THE SYSTEM. FINDING 3. THE CREW RETARDED A THROTTLE TO IDLE TO SIMULATE THREE-ENGINE OPERATIONS. THIS ILLUMINATED THE GEAR-UP WARNING LIGHT AND ACTIVATED THE GEAR-UP AURAL WARNING, WHICH WAS SILENCED BY THE CREW. FINDING 4. CAUSE. OPERATIONS FACTOR, SUPERVISION (DIRECT). THE IAC, COPILOT, AND FLIGHT ENGINEER BECAME DISTRACTED BY A PROBLEM WITH IAC'S HEADSET, AND THE IAC FAILED TO MONITOR THE PERFORMANCE OF THE PILOT. FINDING 5. CAUSE. OPERATIONS FACTOR, OPERATOR. THE PILOT CONTINUED PERFORMING AN APPROACH FOR LANDING AND FAILED TO CALL FOR ¢GEAR DOWN' AND THE ¢BEFORE LANDING CHECKLIST.'

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FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

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FINDING 6. AS THE AIRCRAFT SETTLED TO THE RUNWAY, THE PILOT REALIZED THE GEAR WAS NOT DOWN AND INITIATED A GO-AROUND, HOWEVER, THE AIRCRAFT SCRAPED ON THE RUNWAY, SUSTAINING SUBSTANTIAL DAMAGE. FINDING 7. AFTER COMPLETION OF THE GO-AROUND, THE CREW EXTENDED THE GEAR AND PERFORMED A NORMAL RECOVERY, THERE WERE NO INJURIES.

# 801112602

CLASS A DEST MAC C141A 67000030 ACFT DAMAGE - ČLS A DST 0008941077 ENGURY CLASS - FATAL PHASE OF OPR - LANDING-PATTERN DESCRIPTION -

STEPEM

UNGAFE ACT - COLLISION WITH GND (INFLT)

BASIC CAUSE -

RASE OF ASSGN - TRAVIS AFB CAL NEAR BASE - CAIRO WEST IAP UAR

SEZECODE 1 - C22A SEY-CODE 2 -

WORN UNIT CODE -

SCFT 1 LINER

MITE VFR PATTERN, EXCESS BANK/DESCENT

#### FROT COTTON

THAT. AIRCRAFT IMPACT WITH GROUND. MISSION WAS IN EMPORT OF SPECIAL EXERCISE. AS AIRCRAFT WAS MAKING A LEFT TO AIRCRAFT OF THE TURN AND IMPACT THE GROUND. THERE WAS NO PRIOR INDICATION OF AIRCRAFT PROBLEMS; AIRCRAFT WAS TOTALLY DESTROYED. ALL BODIES HAVE BEEN RECOVERED AND EVACUATED. AIRCRAFT WRECKAGE SECURED.

#### THE HARS

C-14LA. FINDING 1. THE CREW WAS CLEARED FOR A VISUAL APPROACH AT NIGHT, AND THE AIRFIELD ENVIRONMENT LACKED MCONLIGHT AND THE USUAL VISUAL CUES. FINDING 2. CAUSE. OPERATIONS FACTOR, OPERATOR. THE PILOT DID NOT REQUEST AN INSTRUMENT APPOACH, ALTHOUGH COMMAND GUIDANCE REQUIRED USE OF AN INSTRUMENT APPROACH, AND THE CREW WAS UNFAMILIAR WITH THIS AIRFIELD. FINDING 3. THE PILOT CONTINUED A GRADUAL DESCENT TOWARD THE AIRFIELD AND INITIATED A LEFT TURN OVER THE FIELD AS THE AIRCRAFT DESCENDED THROUGH 2,000 FEET AGL. FINDING 4. CAUSE. OPERATIONS FACTOR, OPERATOR. THE PILOT ALLOWED THE AIRCRAFT TO ENTER A DANGEROUS STEEP-BANKED, NOSE-LOW ATTITUDE. FATIGUE, SPATIAL DISORIENTATION AND/OR CHANNELIZED ATTENTION CONTRIBUTED TO THIS ERROR. FINDING 5. CAUSE. OPERATIONS FACTOR, OTHER CREWMEMBER. THE COPILOT DID NOT PROVIDE ADEQUATE AND TIMELY ASSISTANCE TO THE PILOT. FINDING 6. THE BANK ANGLE WAS SO STEEP THAT THE GROUND PROXIMITY WARNING SYSTEM (GPWS) DID NOT PROVIDE A TIMELY WARNING OF IMPENDING GROUND IMPACT. FINDING 7. A RECOVERY WAS INITIATED TOO LATE TO PREVENT IMPACT, AND THE AIRCRAFT IMPACTED THE GROUND AND WAS DESTROYED. FINDING 8. ALL CREWMEMBERS AND PASSENGERS WERE FATALLY INJURED; THE CARGO AND SOME AIRFIELD PROPERTY WERE DESTROYED.

THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)
FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

NEAR BASE - LAJES ABS PORTG

T BELLEAN

THAIRM A NDES MAC C141B 60000157 ACFT DAMAGE - CLASS A 0000271184
THOURY CLASS - NONE PHASE OF OPR - TAKEOFF-INIT CLIMB

DESCRIPTION - DROP EXT STORES-JETT (INTENT)

STRUT LEFT MAIN

TAREST ACT - FAILED TO USE TECH DATA

HASIC CAUSE - IMPROPERLY INSTALLED

MASK OF ASSGN - MCGUIRE AFB N J

Bay-Code 1 - G49 SEY-Code 2 -

WORK UNIT CODE -13AAA

MONK UNIT CODE -13AAA

ACFT L LINER

LMLG FAILURE, IMPROPERLY REPACK STRUT

# DESCRIPTION

C-141B. THE MISHAP AIRCRAFT WAS ON A CONTINUATION LEG OF AN AIRLIFT MISSION. DURING TAKEOFF, AT LIFTOFF, THE LEFT MAIN LANDING GEAR (MLG) INNER AND OUTER STRUT COMPONENTS SEPARATED. THE CREW WAS MADE AWARE OF THE PROBLEM AFTER THE GEAR HAD BEEN RETRACTED. CARGO PALLETS WERE JETTISONED OVER THE OCEAN, AND THE CREW LOWERED THE GEAR FOR AN EMERGENCY LANDING. THE LEFT MLG WAS HANGING BY ITS TORQUE ARMS, AND IT BROKE LOOSE SHORTLY AFTER TOUCHDOWN. THE AIRCRAFT SUSTAINED MAJOR STRUCTURAL DAMAGE AS IT CAME TO REST. THERE WERE NO PERSONNEL INJURIES.

# FINDINGS

C-141B. FINDING 1. CAUSE. LOGISTICS FACTOR, SUPERVISION (INDIRECT). LOGISTICS MANAGERS WITHIN AFLC AND THE USING COMMAND, AS WELL AS AFISC, FAILED TO TAKE APPROPRIATE ACTION TO PREVENT RECURRENCE OF A MISHAP WHICH OCCURRED IN 1979. FINDING 2. CAUSE. LOGISTICS FACTOR, EQUIPMENT MAINTENANCE. DURING STRUT REPACK, THE SPECIALIST DID NOT BEND THE LOCK TAB ON THE WASHER WHICH SECURES THE STRUT NUT IN ACCORDANCE WITH TO 1C-141A-2-12JG-1. FINDING 3. THE IMPROPERLY REPAIRED STRUT WAS INSTALLED ON THE MISHAP AIRCRAFT, AND THE UNSECURED STRUT NUT GRADUALLY LOOSENED FROM THE TORQUED POSITION DURING THE ENSUING MISSIONS. FINDING 4. DURING TAKEOFF, THE LOOSE STRUT NUT SEPARATED FROM THE PISTON, ALLOWING THE PISTON AND BOGIE TO SEPARATE FROM THE OUTER CYLINDER AND HANG DOWN BY THE TORQUE ARMS. FINDING 5. THE CREW BURNED OFF EXCESS FUEL, JETTISONED THE CARGO, AND INITIATED A RECOVERY AT THE DEPARTURE BASE. FINDING 6. DURING THE LANDING, THE UNSECURED BOGIE WEDGED UNDER THE FUSELAGE MOMENTARILY, THEN SEPARATED FROM THE TORRUE ARMS. FINDING 7. THE AIRCRAFT SKIDDED ON THE NOWHER I ENGINE, LEFT WINGTIP AND UPPER TORQUE ARM, SUSTAINING MAJOR DAMAGE: THERE WERE NO PERSONNEL INJURIES.

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320831002

CLASS A DEST MAC C141B 64000652 ACFT DAMAGE - CLS A DST 0012909216
INJURY CLASS - FATAL PHASE OF OPR - LOW LEVEL

DESCRIPTION -

SYSTEM

UNSAFE ACT - COLLISION WITH GND (INFLT)

BASIC CAUSE -

BASE OF ASSGN - CHARLESTON AFB S C NEAR BASE - MCGHEE/TYSON APT T

SEY-CODE 1 - C20B SEY-CODE 2 -

WORK UNIT CODE -

ACFT 1 LINER

HIT MOUNTAIN AVOIDING WX, SOLL MISSION

# DESCRIPTION

C-141B. THE MISHAP AIRCRAFT WAS SCHEDULED FOR A DAY, VFR SPECIAL OPERATIONS LOW LEVEL (SOLL I) TRAINING MISSION.
MIDWAY BETWEEN THE THIRD AND FOURTH NAVIGATION POINTS ALONG THE LOW LEVEL ROUTE IN MOUNTAINOUS TERRAIN, THE WEATHER DETERIORATED. THE AIRCRAFT IMPACTED 130 FEET BELOW THE CREST OF A 4,908-FOOT MOUNTAIN AND WAS DESTROYED. ALL CREWMEMBERS WERE FATALLY INJURED.

# FINDINGS

C-141B. FINDING 1. THE MISHAP MISSION WAS SCHEDULED AS A DAY, VFR SOLL I TRAINING FLIGHT. FINDING 2. THE PILOTS AND NAVIGATORS PERFORMED INDIVIDUAL MISSION PLANNING, BUT DID NOT CONDUCT A THOROUGH GROUP STUDY, REQUIRED BY REGULATION, OF THE INTENDED FLIGHT PATH AND SURROUNDING TERRAIN FEATURES. FINDING 3. THE PREDEPARTURE WEATHER BRIEFING INDICATED THAT THE WEATHER CONDITIONS ALONG PORTIONS OF THE INTENDED ROUTE, PARTICULARLY IN THE MOUNTAINOUS TERRAIN, COULD BE BELOW VISUAL ROUTE (VR) AND VER MINIMA. FINDING 4. SOLL TRAINING WAS ACCOMPLISHED DURING THE INITIAL SEGMENTS OF THE VISUAL ROUTE DESPITE WEATHER BELOW VFR MINIMA. FINDING 5. THE WEATHER BRIEFLY IMPROVED FOR A PORTION OF THE ROUTE PRIOR TO THE ENTERING THE MOUNTAINOUS TERRAIN. FINDING 6. CAUSE. OPERATIONS FACTOR, OPERATOR. AS THE AIRCRAFT ENTERED MOUNTAINOUS TERRAIN, THE WEATHER DETERIORATED TO BELOW VR MINIMA. ATTEMPTING TO MAINTAIN VFR, THE PILOT TURNED NORTHEASTERLY TOWARD HIGHER TERRAIN, ENTERED IMC CONDITIONS, AND FAILED TO GENERATE SUFFICIENT CLIME TO AVOID SHARPLY RISING TERRAIN. FINDING 7. THE AIRCRAFT IMPACTED A MOUNTAIN AND WAS DESTROYED. ALL CREWMEMBERS WERE FATALLY INJURED.

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CLASS A DEST NAC C141B 64000624 ACFT DAMAGE - CLS A DST 0014964099 INJURY CLASS - FATAL PHASE OF OPR - TAKEOFF-INIT CLIMB DESCRIPTION - IGN SOURCES-ENGINES SYSTEM TURBINE/DISC COOLING SYSTEM UNSAFE ACT - IMPROPERLY MANUFACTURED BISIC CAUSE - TURBINE DAMAGE UMSE OF ASSGN - CHARLESTON AFB S C NEAR BASE - SIGONELLA APT ITAL SCY-CODE 1 - I60 SEY-CODE 2 -TRE UNIT CODE -23EBN

THER

THERE EXPL, CARGO FIRE, CREW INCAPACITATED

#### H. I. I. P. PION

C-1413. THE MISHAP AIRCRAFT WAS DEPARTING ON THE SECOND LEG OF A CARGO AIRLIFT MISSION. IMMEDIATELY AFTER DEPARTURE, FIRE WAS OBSERVED IN THE VICINITY OF THE NUMBER A BRGINE. THE AIRCRAFT ENTERED A RIGHT TURN, CROSSED A DIDGELINE, ENTERED A STEEP RIGHT BANK, AND IMPACTED THE GROUND. ALL PERSONNEL ABOARD SUSTAINED FATAL INJURIES, AND THE AIRCRAFT WAS DESTROYED.

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PARAB. FINDING 1. CAUSE. LOGISTICS FACTOR, OTHER JERSONNEL. THE C-141 ONBOARD FIRE SUPPRESSION CAPABILITY IS INADEQUATE TO CONTROL A CARGO COMPARTMENT FIRE. FINDING 2. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. TO C-141B-1 EMERGENCY PROCEDURES FOR FUSELAGE FIRE/SMOKE AND UMBS ELIMINATION ARE INADEQUATE. FINDING 3. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. THE DESIGN OF THE LIRCREW SMOKE MASK IS DEFICIENT IN THAT IT CANNOT BE DONNED RAPIDLY IN A SMOKE AND/OR TOXIC FUMES ENVIRONMENT. FINDING 4. CAUSE. LOGISTICS FACTOR, EQUIPMENT MAINTENANCE. DURING DEPOT LEVEL REPLACEMENT OF THE NUMBER 4 ENGINE TURBINE CASE FRONT SHELF, THE COOLING AIR HOLES TO THE MECOND STAGE TURBINE STATOR ASSEMBLY WERE PARTIALLY BLOCKED IT DESPLACED METAL. FINDING 5. CAUSE. LOGISTICS FACTOR, THE DEPOT QUALITY ASSURANCE THE CYCRE DID NOT DETECT THE PARTIALLY BLOCKED HOLES. THE ST S. LACK OF COOLING AIR RESULTED IN FAILURE OF 23 CHOOMS STAGE TURBINE ASSEMBLY VANE LUGS. THIS ALLOWED THE TARE STATOR ASSEMBLY TO MOVE AFT AND RUB THE SECOND STAGE TURBINE DISK RESULTING IN STRESS RUPTURE OF THE DISK. FINDING 7. CATASTROPHIC SEPARATION OF THE RUPTURED DISK RESULTED IN ENGINE COWLING FAILURE. TURBINE COMPONENTS PERETRATED THE FUSELAGE AND STARTED ONE OR MORE FIRES INSIDE THE CARGO COMPARTMENT WHICH GENERATED TOXIC SMOKE AND FUNES THAT FILLED THE CARGO COMPARTMENT AND COCKPIT. FINDING 8. THE PILOT DID NOT IMMEDIATELY DON HIS OXYGEN/SMOKE MASK. THE MOST PROBABLE REASON IS TASK SATURATION DUE TO MULTIPLE EMERGENCIES. FINDING 9. THE AFRORAFT ENTERED A RIGHT TURN TO EXECUTE AN EMERGENCY RETURN TO THE FIELD. FINDING 10. THE CREW WAS UNABLE TO THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)

FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

the participate the complete reco

MAINTAIN CONTROL OF THE AIRCRAFT FOR ONE OR A COMBINATION OF THE FOLLOWING POSSIBLE REASONS: (1) RESTRICTED VISIBILITY IN THE COCKPIT. (2) PHYSICAL INCAPACITATION INDUCED BY SMOKE INHALATION. (3) TASK SATURATION INDUCED BY MULTIPLE EMERGENCIES AND POSSIBLE LOSS OF PITCH AND REDDER TRIM. FINDING 11. THE AIRCRAFT STEADILY INCREASED ITS RIGHT BANK AND IMPACTED THE GROUND, DESTROYING THE AIRCRAFT AND FATALLY INJURING THE EIGHT CREW MEMBERS AND ONE PASSENGER.

# 861005101

CLASS A NDES MAC C141B 65000246 ACFT DAMAGE - CLASS A 0002164760
INJURY CLASS - NONE PHASE OF OPR - TAXIING-LANDING
DESCRIPTION - OTH COLL-WITH NON-ACFT ON GRD
SYSTEM
UNSAFE ACT - IMPROPER MAINT SUPERVISION
BASIC CAUSE BASE OF ASSGN - TRAVIS AFB CAL NEAR BASE - TRAVIS AFB CAL
SEY-CODE 1 - Y10 SEY-CODE 2 -

ACPT & LINER

WORK UNIT CODE -

WAME TO PARK, HIT LIGHT POLE, WING FIRE

#### DESCRIPTION

C-141B. THE MISHAP AIRCRAFT HAD JUST COMPLETED A 1-DAY CONUS AIRLAND MISSION AND RECOVERED AT HOME STATION.

ENROUTE TO THE ASSIGNED PARKING SPOT, THE AIRCRAFT WAS LED OFF THE ESTABLISHED ROUTES BY GROUND PERSONNEL, AND WHILE UNDER THE GUIDANCE OF GROUND MARSHALLERS, COLLIDED WITH A MIGH INTENSITY LAMP POLE. THE FORCE OF THE COLLISION CRUSHED THE LEADING EDGE OF THE LEFT WING APPROXIMATELY 39 HIGHES FROM THE LEFT WING TIP, FRACTURED A SPAR, AND HUPTURED THE FUEL TANK. DAMAGED WIRING PROVIDED AN IGNITION DOURCE FOR THE LEAKING FUEL. FIRE DESTROYED THE LEFT WING AND DAMAGED THE NUMBERS 1 AND 2 ENGINES AND FUSELAGE. THE CREW SHUTDOWN THE ENGINES AND ALL SEVEN CREWMEMBERS AND THE 23 PASSENGERS SAFELY GROUND EVACUATED.

# FIND NGS

C-141B. FINDING 1. CAUSE. LOGISTICS FACTOR, SUPERVISION (DIRECT). THE FLIGHTLINE EXPEDITER FAILED TO TAKE SUPERVISORY ACTION TO STOP THE HEAD MARSHALLER FROM USING NONSTANDARD AND UNSAFE METHOD TO "BLOCK IN" THE AIRCRAFT. FINDING 2. CAUSE. LOGISTICS FACTOR, OPERATOR. THE HEAD MARSHALLER FAILED TO CORRECTLY POSITION THE MARSHALLERS, AND USE THE NUMBER OF MARSHALLERS THAT WOULD BE NECESSARY FOR THE INTENDED MANEUVER. FINDING 3. BOTH MARSHALLERS FAILED TO RECOGNIZE THE AIRCRAFT'S LACK OF WINGTIP CLEARANCE FROM AN ILLUMINATED LIGHT POLE IN TIME TO GIVE THE PILOT A TIMELY STOP SIGNAL. FINDING 4. THE EXPEDITER PROVIDED LEAD-IN SERVICE OFF THE ESTABLISHED TAXI LINE FOR A NONSTANDARD PARKING MANEUVER, AND THE PILOT FOLLOWED, EVEN AFTER VOICING CONCERN ON THE SAFETY OF THESE ACTIONS. THIS MODIFIED THE INTENDED ROUTE. FINDING 5. CAUSE. OPERATIONS FACTOR, THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)

FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

CLEARANCE AND FAILED TO STOP THE AIRCRAFT BEFORE THE LEFT WING IMPACTED AN ILLUMINATED LIGHT POLE. FINDING 6. THE WING IMPACTED THE LIGHT POLE 39 INCHES INBOARD FROM THE WING TIP, SEVERING ELECTRICAL WIRING WHICH ARCED AND IGNITED THE FUEL FLOW THE RUPTURED TANK, ENGULFING THE WING IN FLAMES.

TIDING 7. THE AIRCREW SHUTDOWN ALL FOUR ENGINES, THE BEALT FORER UNIT, AND THE CREW AND PASSENGERS EGRESSED THE ENGULFIE FIRE. BASE FIRE DEPARTMENT RESPONDED

# TOLESTON

CLASS A NDES MAC C141B 67000029 ACFT DAMAGE - CLASS A 0010015000
INJURY CLASS - NONE PHASE OF OPR - LANDING-ROLL
DESCRIPTION - WEATHER-SNOW
GISTER ACTUATOR SPOILER
UNSAFE ACT - INCORRECT SPEED ON LANDING
HASIC CAUSE - FAIL OPER/FUNCT
HASE OF ASSGN - NORTON AFB CAL NEAR BASE - IWAKUNI AB AIN JAP
SEY-CODE 1 - L76 SEY-CODE 2 WORK UNIT CODE -14HAA

# ACTT 1 LINER

OFF END OF RNWY, WING/GEAR/FUSELAGE DMG

#### DESCRIPTION

PRELIMINARY FROM FINAL PROGRESS REPORT.
C-141E. UPON LANDING THE AIRCRAFT DEPARTED THE END OF
RUNWAY. ALL PASSENGERS AND AIRCREW SAFELY EVACUATED THE
AIRCRAFT. WEATHER VISIBILITY LOW DUE TO SNOW, WINDS
270-300/20 KNOTS, GUSTS TO 35 KNOTS, RUNWAY DRY.
MINOR INJURIES HAVE BEEN REPORTED.

# FINDINGS

PRELIMINARY FROM FINAL PROGRESS REPORT. C-141B. FINDING 1. DUE TO STRONG GUSTY CROSSWINDS, THE PILOT ELECTED TO MAKE AN APPROACH FLAP LANDING AND FLY THE APPROACH 10-15 KNOTS ABOVE APPROACH SPEED. FINDING 2. (CAUSE) DUE TO A LAPSE IN THE PILOTS' FLIGHT DISCIPLINE ON SHORT FINAL, THE PILOT LANDED THE AIRCRAFT 32 KNOTS ABOVE TOUCHDOWN AIRSPEED IN A NOSE-LOW ATTITUDE. FINDING 3. (CAUSE) FOR AN UNDETERMINED REASON, THE SPOILERS FAILED TO DEPLOY WHICH ALLOWED THE AIRCRAFT TO REMAIN IN GROUND EFFECT AND PREVENTED MLG TOUCHDOWN. FINDING 4. (CAUSE) THE PILOTS FAILED TO RECOGNIZE THAT THE MLG WERE NOT IN CONTACT WITH THE RUNWAY, SELECTED EMERGENCY BRAKES, ALLOWED THE AIRCRAFT'S MLG TO CONTACT THE RUNWAY WITH WHEELS LOCKED WHICH RESULTED IN BLOWN TIRES AND AN UNCONTROLLED COUNTER-CLOCKWISE SKID. FINDING 5. THE AIRCRAFT DEPARTED THE OVERRUN SIDEWAYS SHEARING OFF BOTH MLG AND THE NUMBER 4 ENGINE. FINDING 6. THE RIGHT WING CONTACTED THE GROUND RUPTURING THE NUMBER 4 HAIN FUEL TANK WHICH BURST INTO FLAMES AND DESTROYED THE RIGHT WING OUTBOARD OF THE WING SELUCE. FINDING 7. ALL PASSENGERS AND CREW EVACUATED THE ACCRAFT SAFELY AND THE CRASH FIRE RESCUE TEAM EXTINGUISHED THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)

THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)
FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

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THIS IS A PRIVILEGED DOCUMENT (SEE AFR 127-4)
FOR USE SOLELY FOR SAFETY PURPOSES AND MISHAP PREVENTION

C-141 CLASS A MISHAPS 1962 THRU 1974 (11099) MSGT KASSABIAN, 438MAW/SE, MCGUIRE AFB NJ 08641-5000 650710001 MAJOR MAC C141A 65000220 ACFT DAMAGE- CLASS A INJURY CLASS- NONE PHASE OF OPR- PROLONGED CLIMB 00151456

TYPE 1-AIRFRAME FAILURE

COND 1- EXPLOSIVE DECOMPRESSION

TYPE 2-COND 2-BASIC CAUSES- IMPROPERLY CONNECTED/INSTALLED

BASE OF ASSGN- CHARLESTON AF SC NEAR BASE- CHARLESTON AF SC SEY-CODE 1 - QA SEY-CODE 2 - WORK UNIT CODE -

IDENT DATA PRESS DOOR LOCK FAILED (DESDF. TECH DATA) DESCRIPTION TRAINING CLIMBING THROUGH 19000 FT. PRESSURE DOOR LOCKING ASSY FAILED + EXPLOSIVE DECOMPRESSION OCCURRED. ACFT DAMAGE. SAFE LDG. PRIMARY-MAINT. INADVERTENT RIGGING OF LOCK MECHANISM. CONTR-DESIGN DEFICIENCY OF DOOR WARNING SYS., INSTRUCTIONS IN TECH ORDER NOT EXPLICIT, MAINT. SUPV. ALLOWED DEVIATION FROM TECH ORDER.

650907002 MAJOR MAC C141A 65000281 ACFT DAMAGE- CLS A DST INJURY CLASS- FATAL PHASE OF OPR- PARKED 054122 TYPE 1-FIRE/EXPLOSION ON GROUND COND 1-COND 2-TYPE 2-BASIC CAUSES- INADEQUATE OR POOR DESIGN BASE OF ASSGN- MCCHORD AFB WASH NEAR BASE- MCCHORD AFB WASH SEY-CODE 2 -WORK UNIT CODE -SEY-CODE 1 -

DESCRIPTION NON FLIGHT ACFT DESTROYED BY EXPLOSION + FIRE DURING MAIN TENANCE. RT. EXTENDED RANGE TANK SEPARATED RT WING FROM FUSELAGE. PRIMARY-DESIGN DEFICIENCY IN MD-24 TESTER WITH ADAPTER, COMPOUNDED BY INADEQUATE OPERATING INSTRUCTIONS WHEREIN IT WAS POSSIBLE TO INTRODUCE 115V AC POWER INTO ACFT TANKAGE SYS. CONTR-TECH ORDER INADEQUATE REGARDING GROUNDING OF ACFT

670116001 MAJOR USL C141A 65000230 ACFT DAMAGE- CLASS A
INJURY CLASS- MAJOR PHASE OF OPR- PROLONGED CLIMB 00163220
TYPE 1-AIRFRAME FAILURE COND 1- EXPLOSIVE DECOMPRESSION

TYPE 2- COND 2-

BASIC CAUSES- INADEQUATE OR POOR DESIGN STRUCTURE FAILURE
BASE OF ASSGN- TRAVIS AFB CALIF NEAR BASE- WAKE ISLAND AFS WI
SEY-CODE 1 - QA SEY-CODE 2 - WORK UNIT CODE -

IDENT DATA

EXPLO DECOMP, PRESS DOOR FAILED

DESCRIPTION

AIRLIFT PERSONNEL. AT LEVEL OFF AT FL350 EXPLOSIVE DECOMPRESSION EXPERIENCED. DESCENT MADE AND RETURN TO TAKEOFF
BASE. SUB. DAMAGE. PRIMARY-DESIGN DEFICIENCY OF RAMP
PRESSURE DOOR LATCHING MECHANISM. LACK OF ABILITY TO
POSITIVELY CHECK SECURITY OF HOOK. COMPLEX SYSTEM WITH
NUMEROUS INTEGRATED PRECISION ADJUSTMENTS WHICH MUST BE
COMPLETED CONSECUTIVELY

670220002 MAJOR MAC C141A 65009401 ACFT DAMAGE- CLASS A
INJURY CLASS- NONE PHASE OF OPR- INITIAL CLIMB 00080000

TYPE 1- COND 1TYPE 2- COND 2-

BASIC CAUSES- MALFUNCTIONED OR FAILED

BASE OF ASSGN- DOVER AFB DELAWARE NEAR BASE- YOKOTA AB JAPAN

SEY-CODE 1 - G46 SEY-CODE 2 - WORK UNIT CODE -

IDENT DATA

LT TIRE BLEW, OVERHEATED BRAKES

DESCRIPTION

ROUTINE CARGO MISSION. INITIAL CLIMB. LOUD NOISE AND THUMP

HEARD. FUEL DUMPED AND PRECAUTIONARY LANDING MADE. PRIMARY—

CAUSE OF LEFT AFT MAIN GEAR TIRE FAILURE WAS BRAKE OVER—

HEAT DUE TO AN UNKNOWN MATERIAL FAILURE OR MALFUNCTION IN

THE BRAKE. CONTR-MAINT. SUPV. FAILED TO DETECT INCOMPLETE

ACCOMPLISHMENT OF CHECKLIST. PROBABLE THAT FAILED RETREAD

TIRE WAS OVERINFLATED BY MAINTENANCE.

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670323003 MAJOR MAC C141A 65009407 ACFT DAMAGE- CLS A DST
INJURY CLASS- FATAL PHASE OF OPR- TAXIING FROM LANDING 05710000
TYPE 1-ACFT COLLISION ON THE GROUND COND 1TYPE 2- COND 2-

BASIC CAUSES-

BASE OF ASSGN- MCCHORD AFB WASH NEAR BASE- DA NANG APT VN
SEY-CODE 1 - SEY-CODE 2 - WORK UNIT CODE -

DESCRIPTION COMPLETION OF SCHEDULED CARGO MISSION. CLEARED BY GROUND CONTROL ON WEST TAXIWAY TO CROSS R/W 35L. MARINE ACFT CLEARED BY TOWER FOR IFR DEPARTURE 35R. ACFT COLLIDED AT INTERSECTION. PRIMARY-PILOT FAILED TO CLEAR VISUALLY. CONTR-CREW DID NOT ACKNOWLEDGE TAXI INSTRUCTIONS AT ALL TIMES AND DID NOT VERIFY CLEARANCE LIMITS, EXCESSIVE BACK-GROUND LIGHTING OF VARYING INTENSITY SURROUNDING OPERATING AREAS MAKES R/W AND TAXIWAY IDENTIFICATION DIFFICULT AT NIGHT, CONTROL OPER. FAILED TO IDENTIFY ACFT.

670413001 MAJOR MAC C141A 66000127 ACFT DAMAGE- CLS A DST
INJURY CLASS- FATAL PHASE OF OPR- INITIAL CLIMB 05710000
TYPE 1-COLLISION WITH GROUND OR WATER COND 1- WATER CRASH
TYPE 2- COND 2BASIC CAUSES-

BASE OF ASSGN- MCCHORD AFB WASH NEAR BASE- CAM RANH BAY ABVN
SEY-CODE 1 - M86B SEY-CODE 2 - WORK UNIT CODE -

IDENT DATA

TOOK OFF WITH SPOILERS UP

DESCRIPTION

CARGO MISSION. ON TAKEOFF CONTROLS FELT MUSHY. ACFT CMDR

IN RIGHT SEAT TOOK CONTROL. BEFORE EMERGENCY COULD BE

DECLARED ACFT IMPACTED IN SEA 6000 FT. OFF END OF R/W.

PRIMARY-ACFT CMDR IMPROPERLY ACCOMPLISHED LINE-UP CHECK

LIST AND FAILED TO PLACE SPOILER SELECTOR SWITCH IN RTO

POSITION. CONTR-TAKE OFF LIGHT WILL ILLUMINATE WITH

SPOILER SELECTOR SWITCH IN AUTO-LAND POSITION. GIVES

FALSE SENSE OF SECURITY. SIDE FACING TROOP SEAT BELT ASSY

OCCUPIED BY LOADMASTERS FAILED ON IMPACT.

700818001 MAJOR MAC C141A 66000191 ACFT DAMAGE- CLASS A
INJURY CLASS- NONE PHASE OF OPR- ENGINES RUNNING, NOT TAXIING 00614000
TYPE 1-FIRE/EXPLOSION ON GROUND COND 1- ENGINE SHUTDOWN

TYPE 2- COND 2-

BASIC CAUSES- BROKEN OR SEPARATED

BASE OF ASSGN- ROBINS AFB GEO NEAR BASE- KELLY AFB TEXAS

SEY-CODE 1 - N89 SEY-CODE 2 -

WORK UNIT CODE - 45ACO

IDENT DATA HYD FIRE, #1 PUMP FAILED ON APU EXH

DESCRIPTION A C-141A HAD STARTED ALL ENGINES AND WAS HOLDING FOR TWO ADDITIONAL PASSENGERS. AFTER HOLDING FOR ABOUT FIVE MINUTES, A FIRE WAS NOTED BY THE SCANNER AND MAINTENANCE LAUNCH CREW COMING FROM THE LEFT WHEEL WELL. WHILE THE FIRE GUARD FOUGHT THE FIRE WITH A CO2 EXTINGUISHER, THE PILOT SHUT DOWN NR 1 AND 4 ENGINES AND DIRECTED THE COPILOT TO INFORM THE TOWER. AFTER COMPLETING THE RADIO CALL, REMAINING ENGINES AND APU WERE SHUT DOWN. THE CREW AND PASSENGERS EVACUATED AND THE FIRE WHICH HAD SPREAD TO THE FUSELAGE WAS EXTINGUISHED BY THE BASE FIRE FIGHTING

EQUIPMENT.

FINDINGS

PRIMARY CAUSE WAS MATERIEL FACTOR. FAILURE OF SCREW IN NR 1 PUMP OF NR 3 HYDRAULIC SYSTEM ALLOWED HOUSING ADJUSTING SLEEVE TO SHIFT CAUSING O'RING TO BLOW OUT SPRAYING HYDRAULIC FLUID. PROBABLE IGNITION SOURCE WAS THE APU EXHAUST DUCT. CONTRIBUTING CAUSES WERE (1) HYDRAULIC FLUID MIL-H-5606B IS HIGHLY FLAMMABLE. (2) GTPU EXHAUST DUCT INSULATION IS INADEQUATE TO PREVENT EXPOSING DUCT SURFACES WITH TEMPERATURES IN THE AUTO-IGNITION RANGE OF HYDRAULIC FLUID. (3) DESIGN DEFICIENCIES ALLOWED ACCUMULATION OF HYDRAULIC FLUID IN THE AREAS OF NR 1, 2 AND 3 HYDRAULIC SERVICE CENTERS.

710218002 MAJOR

MAC C141A 65000246 ACFT DAMAGE- CLASS A INJURY CLASS- NONE PHASE OF OPR- PROLONGED CLIMB 00193370
TYPE 1- COND 1- EXPLOSIVE DECOMPRESSION
TYPE 2- COND 2- PRECAUTIONARY/EMG LANDING

BASIC CAUSES- INADEQUATE OR POOR DESIGN

BASE OF ASSGN- TRAVIS AFB CALIF NEAR BASE- SYDNEY APT AUSTL

SEY-CODE 1 - QA SEY-CODE 2 - WORK UNIT CODE -

IDENT DATA DECOMP, N/L/G DAM, HYD FIRE

DESCRIPTION C-141A. FINAL. EXPLOSIVE DECOMPRESSION OCCURRED AT LEVEL OFF AT FL 330. DURING EMERGENCY DESCENT, HYDRAULIC SYSTEMS NUMBER TWO AND THREE WERE LOST. FAILURE OF PRESSURE FLOOR UNDER FLIGHT DECK COMPARTMENT RUPTURED HYDRAULIC LINES, RESULTING IN LOSS OF FLUID IN SYSTEMS TWO AND THREE. LANDING WITH NOSE GEAR UP AND MAIN GEAR DOWN RESULTED IN FRICTION DAMAGE TO NOSE WHEEL DOORS AND FORWARD SECTION OF FUSELAGE. A FIRE OCCURRED DURING THE LANDING ROLL IN THE NOSE WHEEL WELL AND SPREAD TO THE AVIONICS COMPARTMENT. THE FIRE FIGHTERS ARRIVED AS THE AIRCRAFT CAME TO REST AND APPLIED DRY POWDER INTO NOSE WHEEL PLUS FOAM AND CO2, CONTAINING THE FIRE IN ONE MINUTE. PASSENGERS EVACUATED THROUGH TROOP DOORS WITHOUT INCIDENT AND CREW EXITED THROUGH THE FORWARD AND TROOP DOORS.

FINDINGS

C-141A. FINAL. DESIGN DEFICIENCY OF THE PRESSURE BULKHEAD. IF THE ACCESS PANEL TO THIS BULKHEAD HAD BEEN INTERNALLY, RATHER THAN EXTERNALLY MOUNTED, LOAD DISTRIBUTION WOULD HAVE BEEN MORE EVENLY DISTRIBUTED.

730612001 MAJOR INJURY CLASS- NONE PHASE OF OPR- LANDING ROLL 00310097

MAC C141A 64000626 ACFT DAMAGE- CLASS A

TYPE 1-COLLAPSE OR RETRACTION OF GEAR COND 1-

TYPE 2-FIRE/EXPLOSION ON GROUND COND 2-

BASIC CAUSES- STRESS CORROSION

BASE OF ASSGN- DOVER AFB DEL NEAR BASE- DOVER AFB DELAWARE

SEY-CODE 1 - G50 SEY-CODE 2 - WORK UNIT CODE - 13BAA

IDENT DATA N/L/G FAILED, IMP OVER HAUL, HYD FIRE

DESCRIPTION C-141A. ON TAKEOFF FROM A TOUCH-AND-GO LANDING, THE INSTRUCTOR PILOT RECEIVED CLEARANCE FOR A CLOSED PATTERN AND FULL-STOP LANDING. THE VFR PATTERN WAS FLOWN AND A NORMAL TOUCHDOWN ON THE MAIN LANDING GEAR ACCOMPLISHED. WHEN THE NOSE GEAR WAS LOWERED TO THE RUNWAY, THE CREW NOTED UNUSUAL NOISES, VIBRATIONS, AND SETTLING OF THE COCKPIT TO LOWER THAN NORMAL ATTITUDE. THE AIRCRAFT WAS STOPPED AND THE ENGINES WERE SHUT DOWN. THE CREW EVACUATED THE AIRCRAFT WITH NO INJURIES. THE NOSE STRUT OUTER CYLINDER HAD FAILED INSIDE THE NOSE OLEO TRUNNION APPROXIMATELY 3/4 TO 1-3/4 INCHES FROM THE BOTTOM PORTION OF THE TRUNNION. THE AIRCRAFT SKIDDED 4000 FEET WHEN THE NOSE GEAR COLLAPSED. AND FIRE DAMAGE OCCURRED THROUGHOUT THE NOSE WHEEL WELL AREA.

FINDINGS

C-141A. FINDING 1. HUMAN FACTOR, MAINTENANCE. THE BASIC GRINDING PROCESS OF THE NOSE STRUT OUTER CYLINDER, EITHER DURING THE MANUFACTURING OR OVERHAUL STAGE, RESULTED IN GRINDING BURNS THAT INITIATED SHALLOW CRACKING IN THE FORGING. FINDING 2. SUPERVISORY FACTOR, MAINTENANCE. THE QUALITY AND/OR THE CRITERIA OF INSPECTION EITHER DURING THE MANUFACTURE OR OVERHAUL STAGE FAILED TO DISCLOSE THE INDUCED IMPERFECTIONS. FINDING 3. HUMAN FACTOR, MAINTENANCE. THE NOSE STRUT OUTER CYLINDER FAILED DUE TO STRESS CORROSION WHICH RESULTED FROM PREVIOUS FAULTY MANUFACTURE OR OVERHAUL.

730828001 MAJOR MAC C141A 63008077 ACFT DAMAGE- CLS A DST INJURY CLASS- FATAL PHASE OF OPR- DESCENT 06250640 TYPE 1-COLLISION WITH GROUND OR WATER COND 1-TYPE 2-COND 2-

BASIC CAUSES-

BASE OF ASSGN- MCGUIRE AFB N J NEAR BASE- TORREJON AB SPAIN SEY-CODE 1 - C18 SEY-CODE 2 - WORK UNIT CODE -

IDENT DATA HIT MESA, DESCENT MISUNDERSTOOD (OPS/OPERA) DESCRIPTION C-141A. THE AIRCRAFT WAS IN A DESCENT PHASE OF THE FOURTH LEG OF A CARGO MISSION. THE MISSION PROCEEDED NORMALLY AT FLIGHT LEVEL 330 UNTIL LOCAL CONTROL GAVE THE PILOT HIS ENROUTE DESCENT. AIRCRAFT WAS CLEARED FROM FL 330 TO FL 10

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DESCRIPTION AND THEN CLEARED DIRECT TO LOCAL NDB AND FL 060 (TRANSITION LEVEL). THE AIRCRAFT WAS THEN CLEARED TO 5,000 FEET WITH AN ALTIMETER SETTING OF 30.17. THE PILOT CALLED BACK 'UNDERSTAND CLEAR TO DESCEND TO 3,000 FEET .... THIS TRANSMISSION WAS BLOCKED OUT BY ANOTHER AIRCRAFT CALLING CONTROL ON UHF. THE AIRCRAFT WAS THEN CLEARED FOR AN ILS APPROACH, GCA. MONITORED, AND RECEIVED A COMMUNICATION HAND-OFF TO BASE GCA. FOURTEEN SECONDS LATER PILOT CALLED GCA ON VHF, 'GCA, WITH YOU PASSING 5 FOR 3,000.' AS THE PILOT WAS CALLING, THE GCA CONTROLLER WAS ISSUING CONTROL INSTRUCTIONS TO ANOTHER AIRCRAFT. THE CONTROLLER HEARD THE PILOT SAY HIS CALL NUMBERS, AS HE FINISHED HIS TRANSMISSION WITH THE OTHER AIRCRAFT AND TOLD HIM TO 'STANDBY,' AND ISSUED ANOTHER AIRCRAFT INSTRUCTIONS TO TURN FINAL APPROACH. AFTER TALKING MORE WITH THE OTHER TWO AIRCRAFT, THE GCA CONTROLLER THEN CALLED THE ACCIDENT AIRCRAFT FOR HIS DME AND RADIAL. APPROXIMATELY 32 SECONDS HAD PASSED SINCE THE CONTROLLER HAD TOLD THE PILOT TO STAND BY. THE PILOT ANSWERED, '... AHHHH STANDBY:' THIS WAS THE AIRCRAFT'S LAST RECORDED TRANSMISSION. THE AIRCRAFT IMPACTED WITH THE GROUND AT APPROXIMATELY 217.5 KNOTS GROUND SPEED. THE ELEVATION OF THE MESA AT IMPACT POINT WAS 3,050 FEET. THE AIRCRAFT PROCEEDED IN A STRAIGHT LINE ACROSS THE MESA, BECAME AIRBORNE OVER A RAVINE AND ROLLED INVERTED. IMPACTING AND BEING TOTALLY DESTROYED. ALL PERSONS ON BOARD WITH THE EXCEPTION OF THE NAVIGATOR WERE KILLED ON IMPACT.

FINDINGS

C-141A. FINDING 1. SUPERVISORY FACTOR, OTHER. THE AIRCRAFT COMMANDER FAILED TO EXERCISE HIS INHERENT COMMAND RESPONSIBILITIES AND DIRECT THE CREW'S ACTIVITIES DURING THE CREW REST PERIOD. FINDING 2. HUMAN FACTOR, OTHER AIRCREW. THE AIRCREW FAILED TO INSURE ADEQUATE CREW REST, INDUCING FATIGUE DURING THEIR SCHEDULED 24-HOUR GROUND TIME. FINDING 3. HUMAN FACTOR, PILOT. THE AIRCREW FAILED TO FOLLOW PRESCRIBED C-141A DASH ONE PROCEDURES. CHECKLISTS WERE IMPROPERLY ACCOMPLISHED; SWITCHES WERE IN WRONG POSITIONS; ALTIMETERS WERE IMPROPERLY SET. FINDING 4. SUPPORT FACTOR, TRAFFIC CONTROL. APPROACH CONTROL PROVIDED LESS THAN OPTIMUM SERVICE BY INITIATING A COMMUNICATIONS TRANSFER OF THE AIRCRAFT UNDER HIS RADAR CONTROL WITHOUT EFFECTING AN ACTUAL RADAR HANDOFF. FINDING 5. HUMAN

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FINDINGS

FACTOR, OTHER AIRCREW. THE PILOT IN THE LEFT SEAT, THE OBSERVER PILOT IN THE JUMP SEAT, AND THE DUTY NAVIGATOR FAILED TO PROPERLY MONITOR THE AIR TRAFFIC CONTROL CLEARANCE AND THE MINIMUM SAFE ALTITUDE, THEREBY ALLOWING DESCENT BELOW SAFE TERRAIN CLEARANCE AND AIR TRAFFIC CONTROL CLEARANCE ALTITUDES. FINDING 6. HUMAN FACTOR, PILOT. THE AIRCRAFT COMMANDER ALLOWED THE AIRCRAFT TO DESCEND BELOW AN ALTITUDE THAT WOULD INSURE PROPER TERRAIN CLEARANCE. COMMENT OF PROPERTY OF THE PARTY OF THE PART

CHARLES OF HER COURSE SEPTING OF SA

740818001 MAJOR MAC C141A 65000274 ACFT DAMAGE- CLS A DST
INJURY CLASS- FATAL PHASE OF OPR- DESCENT 07099403
TYPE 1-COLLISION WITH GROUND OR WATER COND 1TYPE 2-COND 2-TYPE 2-BASIC CAUSES-BASE OF ASSGN- CHARLESTON AFB S C NEAR BASE- LA PAZ AFD BOLIV

THE RESIDENCE LANGUAGE CO. ST. POST CO. ST.

SEY-CODE 1 - C18 SEY-CODE 2 - WORK UNIT CODE -

IDENT DATA DESC BELOW MSA, HIT MTS (ALSO OPERA) DESCRIPTION C-141A. THE AIRCRAFT WAS ON A SPECIAL ASSIGNMENT AIRLIFT MISSION (SAAM). THE MISSION HAD PROCEEDED ROUTINELY TO A POINT 127 MILES FROM DESTINATION AT FL 370. AT THIS POINT THE AIRCRAFT WAS IN CONTACT WITH THE AREA CONTROL CENTER (ACC) ON HIGH FREQUENCY (HF) RADIO AND WAS CLEARED TO CONTACT THE DESTINATION TOWER ON VHF FREQUENCY. APPROXIMATELY 1-1/2 MINUTES LATER, THE AIRCRAFT RETURNED TO THE ACC ON HF FREQUENCY, REPORTING THAT THEY WERE UNABLE TO CONTACT TOWER ON VHF. THE AIRCRAFT WAS ASKED FOR POSITION AND REPLIED WITH AN ESTIMATED TIME FOR THE INITIAL APPROACH FIX (IAF) NAVIGATION AID OF 1535Z. AT 1522Z, ACC CLEARED THE AIRCRAFT TO DESCEND TO FL 240 AND GAVE THE DESTINATION WEATHER. THE AIRCRAFT WAS AGAIN CLEARED TO CONTACT TOWER ON VHF. AT APPROXIMATELY 1529Z, THE AIRCRAFT CONTACTED THE TOWER AND GAVE AN ESTIMATED IAF TIME OF 1533Z (TWO MINUTES EARLIER THAN THE PREVIOUS ESTIMATE): THE TOWER THEN CLEARED THE AIRCRAFT TO DESCEND TO FL 180. THIS WAS THE LAST CONTACT WITH THE AIRCRAFT. THE AIRCRAFT CRASHED, ON COURSE, AT THE 18,700-FOOT LEVEL OF A 19,974-FOOT MOUNTAIN, 16 MILES NORTH OF THE DESTINATION. ALTHOUGH THE ACCIDENT

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DESCRIPTION SITE AND AIRCRAFT WERE POSITIVELY IDENTIFIED PHOTOGRAPHICALLY, THE ACCIDENT SITE WAS INACCESSIBLE. ALL ABOARD ARE PRESUMED DEAD.

FINDINGS

C-141A. FINDING 1. CAUSE. OPERATIONS FACTOR, SUPERVISION (INDIRECT). MAC AIRCREWS WERE INADEQUATELY TRAINED WITH REGARD TO TERRAIN AVOIDANCE RESPONSIBILITY IN A NON-RADAR ENVIRONMENT UNDER THE RULES OF THE INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO). FINDING 2. CAUSE. OPERATIONS FACTOR, SUPERVISION (INDIRECT). MAC'S HAZARD REPORTING SYSTEM FAILED TO FUNCTION ADEQUATELY TO IDENTIFY AN EXISTING HAZARD AND TO WARN AIRCREWS IN A TIMELY MANNER. FINDING 3. CAUSE. OPERATIONS FACTOR, SUPERVISION (INDIRECT). THE OFFICER IN CHARGE, OL-A, 437 MAW, HOWARD AFB, CZ, FAILED TO INSURE THAT A HAZARD, VERBALLY REPORTED TO HIM BY A MAC AIRCREW, WAS BRIEFED TO THE ACCIDENT AIRCREW. FINDING 4. CAUSE. OPERATIONS FACTOR, OPERATOR. THE AIRCRAFT COMMANDER ACCEPTED A CLEARANCE AND DESCENDED TO AN ALTITUDE LOWER THAN THE MINIMUM SECTOR ALTITUDE IN HOUNTAINOUS TERRAIN. FINDING 5. THE AIRCRAFT STRUCK A 19,974-FOOT MOUNTAIN AT APPROXIMATELY 18,700 FEET AND WAS DESTROYED, KILLING ALL ABOARD.

741216001 MAJOR MAC C141A 63008089 ACFT DAMAGE- CLASS A INJURY CLASS- NONE PHASE OF OPR- IN-FLIGHT NORMAL 00750000 TYPE 1-DROPPED OBJECT
TYPE 2-AIRFRAME FAILURE COND 1- EXPLOSIVE DECOMPRESSION COND 2- PRECAUTIONARY/EMG LANDING BASIC CAUSES- TO IN ERROR OR INADEQUATE BASE OF ASSGN- MCGUIRE AFB N J NEAR BASE- LORING AFB MAINE SEY-CODE 2 - WORK UNIT CODE -SEY-CODE 1 - QA

IDENT DATA DECOMP, PETAL DOORS UNKLOCKED (DESDF TOO) DESCRIPTION C-141A. WHILE IN A LEVEL FLIGHT AT 35,000 FEET ON AN AIRLIFT MISSION, THE AIRCRAFT EXPERIENCED A RAPID DECOMPRESSION. THE RAME, PRESSURE DOOR, AND BOTH PETAL DOORS SEPARATED FROM THE AIRCRAFT. THE AIRCREW DONNED THEIR SWEEP-ON OXYGEN MASKS WITH THE PILOT EXPERIENCING CONSIDERABLE DIFFICULTY IN DONNING HIS. NO PASSENGERS WERE ABOARD THE AIRCRAFT. A DESCENT WAS INITIATED TO 10,000 FEET, AND THE AIRCRAFT WAS CONFIGURED FOR LANDING. A

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DESCRIPTION CONTROLLABILITY CHECK WAS SATISFACTORILY ACCOMPLISHED, AND THE AIRCRAFT WAS LANDED UNEVENTFULLY. THERE WERE NO AIRCREW INJURIES OR NON-GOVERNMENT PROPERTY DAMAGE REPORTED. THE AIRCRAFT STRUCTURE WAS DAMAGED EXTENSIVELY DUE TO THE DEPARTURE OF THE RAMP AND DOORS AND THE RESULTING AERODYNAMIC FORCES.

FINDINGS

C-141A. ACCIDENT FINDINGS. FINDING 1. CAUSE. LOGISTICS FACTOR, SUPERVISION (INDIRECT). TO 1C-141A-2-2 AND TO 1C-141A-4-4 DID NOT PROVIDE ADEQUATE INSTRUCTION FOR THE PROPER MAINTENANCE AND RIGGING OF THE RAMP AND PRESSURE DOOR SYSTEM. FINDING 2. CAUSE. OPERATIONS FACTOR, SUPERVISION (INDIRECT). TO 1C-141A-1, SECTION 3, PROCEDURES FOR EMERGENCY DESCENT DID NOT CONSIDER THE RAMIFICATIONS OF HIGH DESCENT AIRSPEEDS IN CONJUNCTION WITH STRUCTURAL FAILURES OF THE RAMP OR OTHER LOAD BEARING STRUCTURES. FINDING 3. CAUSE. LOGISTICS FACTOR, SUPERVISION (INDIRECT). THE CRITICALITY OF APPROPRIATE INSPECTION AND MAINTENANCE OF THE C-141 RAMP AND PRESSURE DOOR SYSTEM WAS NOT IDENTIFIED BY MAJCOM SUPERVISION. FINDING 4. CAUSE. LOGISTICS FACTOR, SUPERVISION (INDIRECT). SINCE THE CRITICALITY OF THE RAMP AND DOOR RIGGING WAS NOT IDENTIFIED, MAINTENANCE PERSONNEL WERE INADEQUATELY TRAINED AND SUPERVISED IN RAMP AND PRESSURE DOOR MAINTENANCE. FINDING 5. AS A RESULT OF INADEQUATE TRAINING AND SUPERVISION, MAINTENANCE OF THE AFT DOOR SYSTEM DURING THE 90-DAY PERIOD PRIOR TO THE ACCIDENT WAS INADEQUATE. FINDING 6. CAUSE. LOGISTICS FACTOR, OTHER PERSONNEL. THE DESIGN OF THE DOOR WARNING SYSTEM WAS NOT ADEQUATE TO DETECT THAT THE DOOR WAS NOT PROPERLY RIGGED OR FULLY LOCKED. FINDING 7. THE LEFT CARGO RAMP LOCKS WERE NEVER LOCKED IN THE FULLY OVER-CENTER POSITION. FINDING 8. THE LEFT SIDE LOCKS MOVED FORCEFULLY TO THE FULLY UNLOCKED POSITION, INITIATING THE FAILURE SEQUENCE. FINDING 9. THE LEFT CARGO RAMP HINGE ASSEMBLY WAS COMPLETELY SEVERED FROM THE FUSELAGE BULKHEAD. THE AIRCRAFT PRESSURIZATION FORCE (OVER 8 PSI), TOGETHER WITH THE FAILED COMPONENTS LED TO THE COMPLETE LOSS OF THE CARGO RAMP, PRESSURE DOOR AND PETAL DOORS. FINDING 10. AS A RESULT OF THE LOSS OF THE CARGO RAMP AND ESCAPING PRESSURIZATION AIR, THE AIRCRAFT OSCILLATED IN PITCH (+3.08 TO -1.6 G'S) CAUSING STRUCTURAL DAMAGE TO THE AIRCRAFT SLOPING LONGERONS. FINDING 11. THE

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FINDINGS

PILOT ENTERED AN EMERGENCY DESCENT IN EXCESS OF 260 KNOTS, EXCEEDING RAMP OPEN RECOMMENDED AIRSPEED (200 KNOTS), CAUSING ADDITIONAL DAMAGE TO THE AIRCRAFT SLOPING LONGERONS. LIFE SCIENCES FINDINGS. FINDING 1. THE PILOT EXPERIENCED A BRIEF EPISODE OF HYPOXIA BECAUSE OF IMPROPER DONNING OF HIS MBU-10/P SWEEP-ON OXYGEN MASK. FINDING 2. DUE TO CONFUSION EXISTING WHEN CREW MEMBERS DONNED THEIR SWEEP-ON OXYGEN MASKS, SOME INTERPHONE COMMUNICATION PROBLEMS OCCURRED.

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